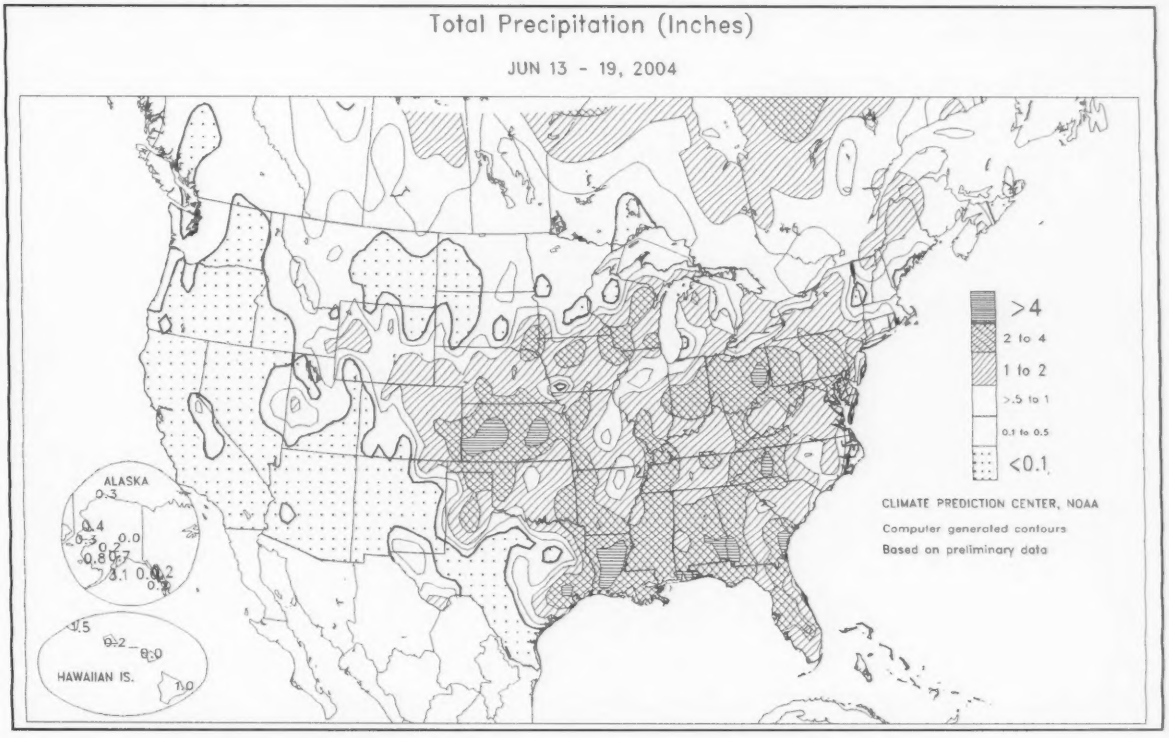
Volume 91, No. 25 http://www.usda.gov/oce/waob/jawf/wwcb.html June 22, 2004

WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service
and World Agricultural Outlook Board



HIGHLIGHTS

June 13 - 19, 2004

Highlights provided by USDA/WAOB

Drier weather overspread the **northern Plains**, but locally heavy showers and thunderstorms maintained adequate to excessive soil moisture reserves in the **Midwest**. Soggy conditions continued to slow **Midwestern** fieldwork, including initial soft red winter wheat harvesting. Chilly weather hampered crop development across the **northern Plains** and **upper Midwest**, but rapid crop growth was noted elsewhere in the **Corn Belt**, despite a cooling trend. Meanwhile on the **central and southern Plains**, widespread thunderstorms arrived early in the week and continued daily thereafter. The **Plains'** rain slowed winter wheat harvesting but provided pasture and

(Continued on page 5)

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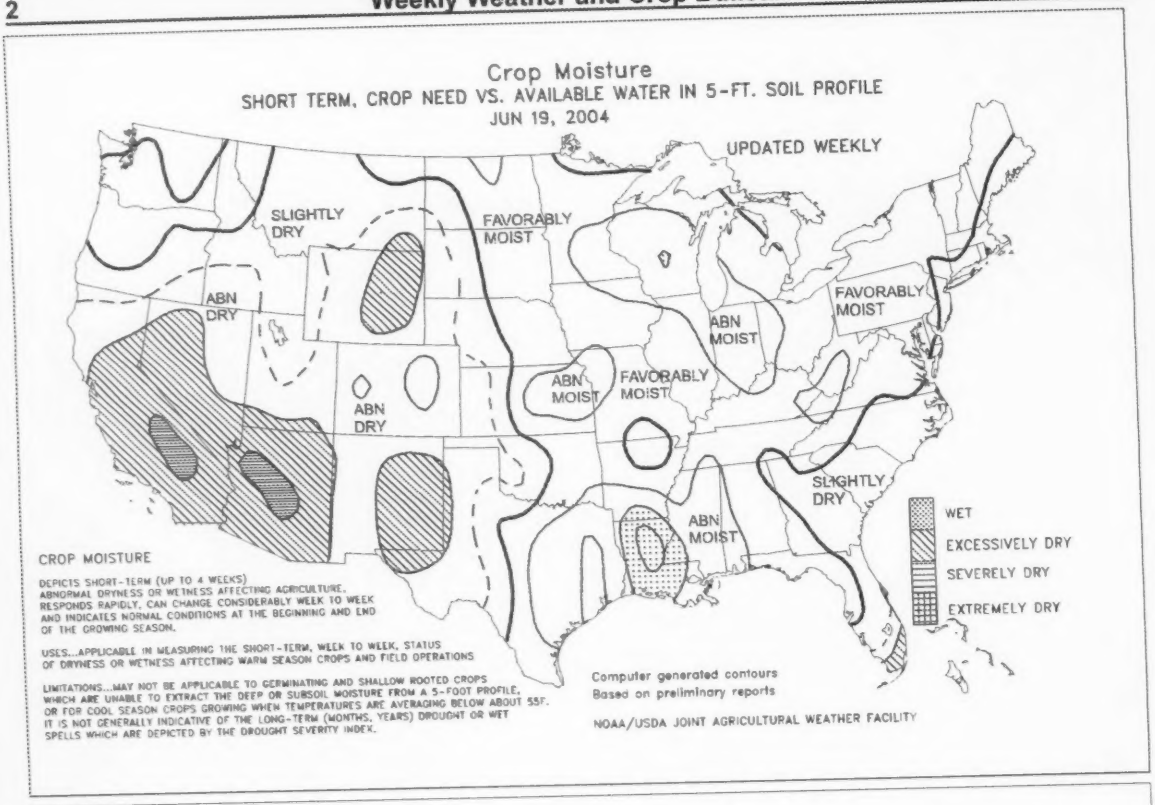
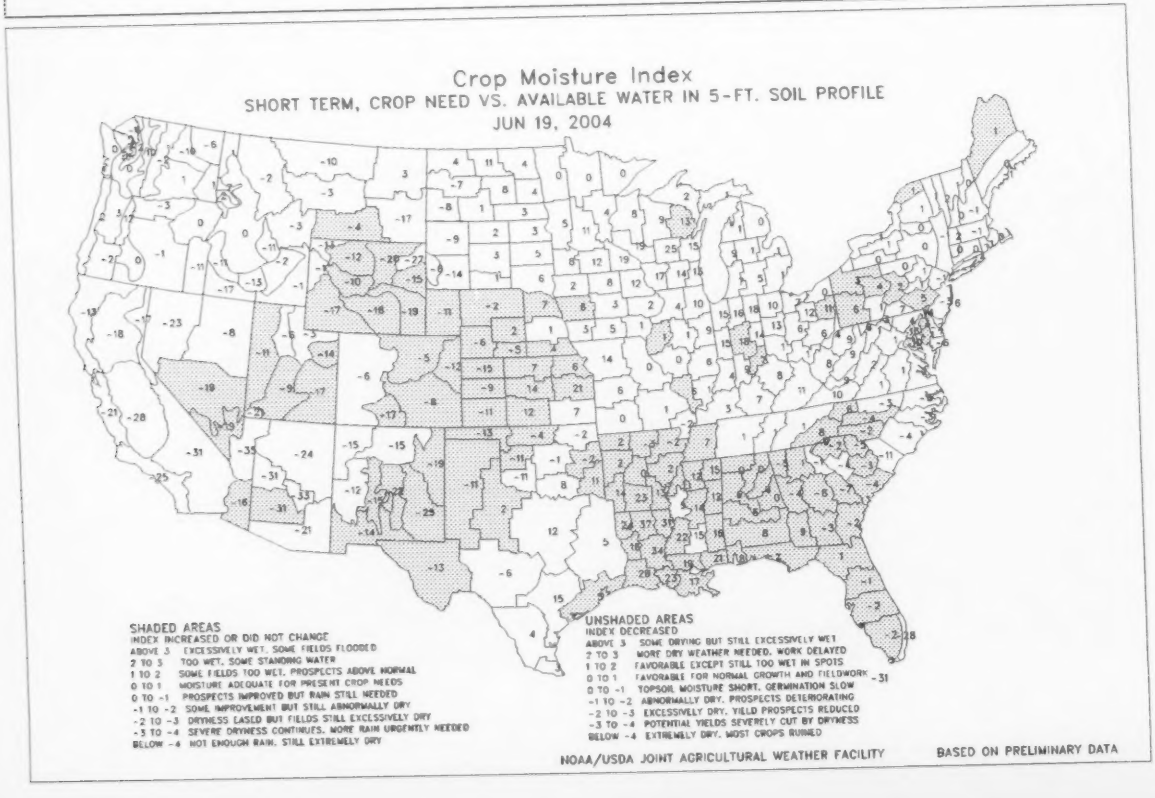
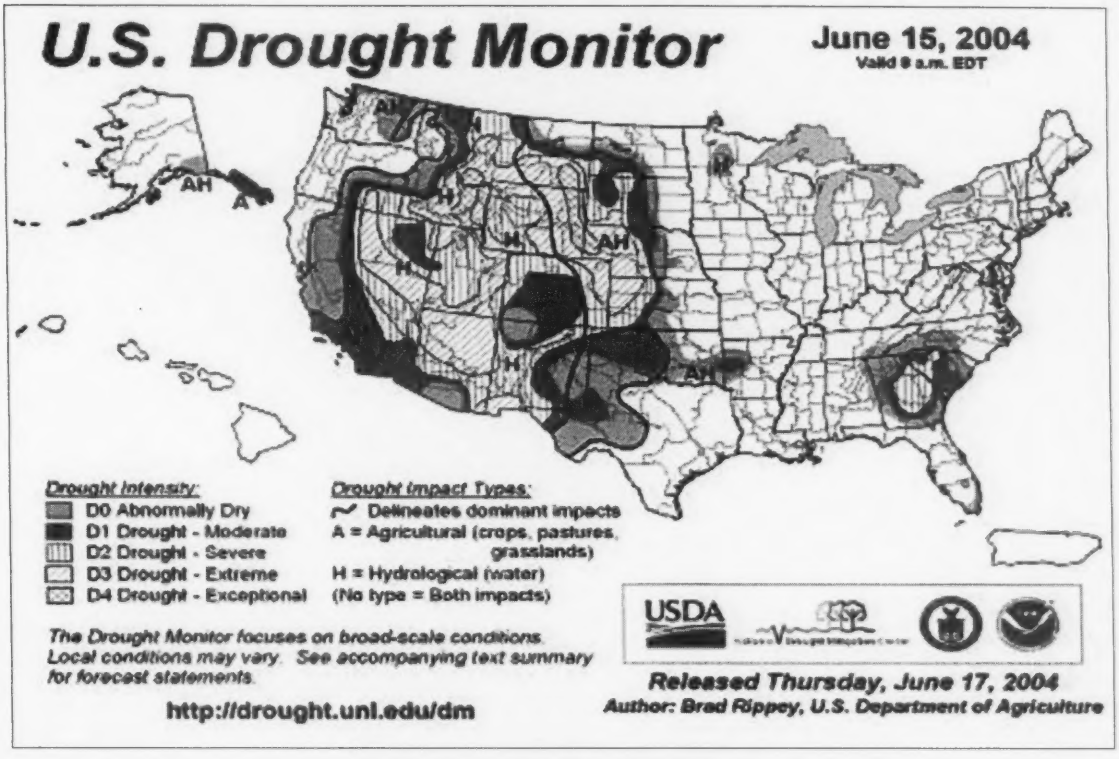
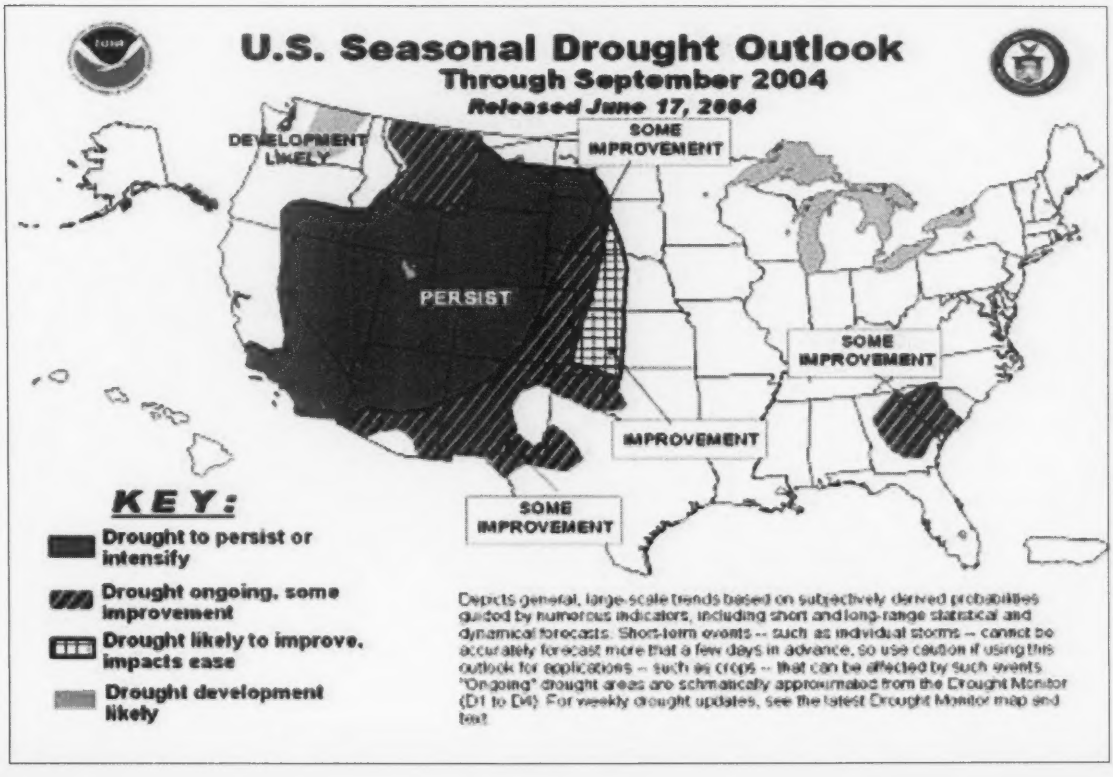

Crop Moisture
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
JUN 19, 2004
UPDATED WEEKLY
SLIGHTLY DRY
FAVORABLY MOIST
ABN DRY
ABN MOIST
FAVORABLY MOIST
ABN DRY
ABN MOIST
FAVORABLY MOIST
ABN MOIST
SLIGHTLY DRY
WET
EXCESSIVELY DRY
SEVERELY DRY
EXTREMELY DRY
CROP MOISTURE
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE. RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.
USES...APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS
LIMITATIONS...MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A 5-FOOT PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55F. IT IS NOT GENERALLY INDICATIVE OF THE LONG-TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.
Computer generated contours
Based on preliminary reports
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

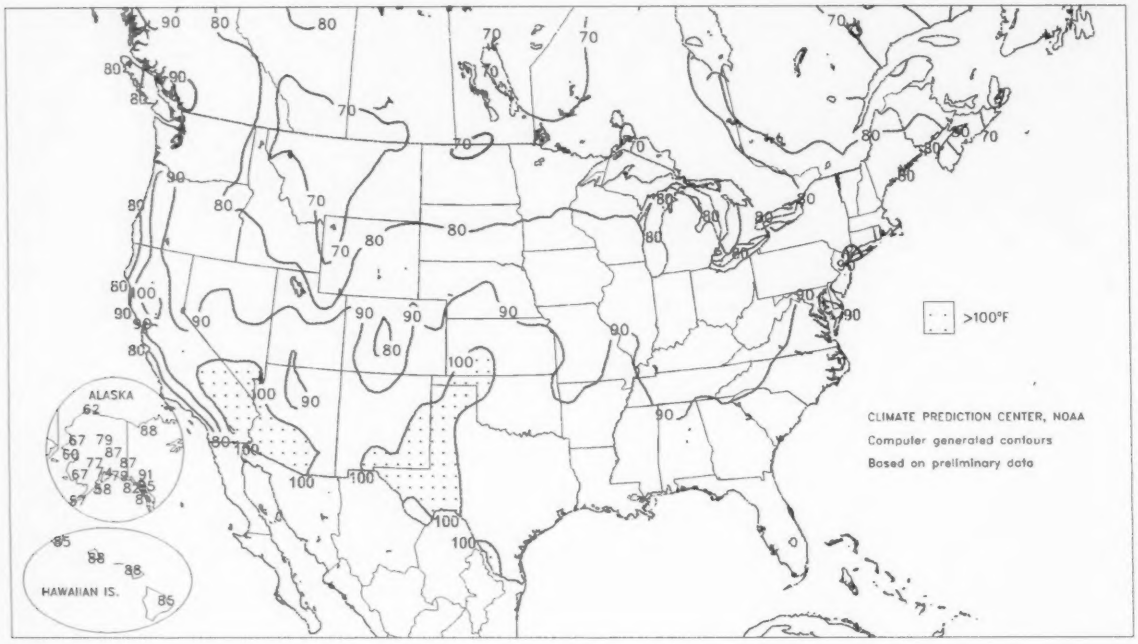

Crop Moisture Index
SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
JUN 19, 2004
SHADED AREAS
INDEX INCREASED OR DID NOT CHANGE
ABOVE 3 EXCESSIVELY WET, SOME FIELDS FLOODED
2 TO 3 TOO WET, SOME STANDING WATER
1 TO 2 SOME FIELDS TOO WET, PROSPECTS ABOVE NORMAL
0 TO 1 MOISTURE ADEQUATE FOR PRESENT CROP NEEDS
0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2 SOME IMPROVEMENT BUT STILL ABNORMALLY DRY
-2 TO -3 DRYNESS EASED BUT FIELDS STILL EXCESSIVELY DRY
-3 TO -4 SEVERE DRYNESS CONTINUES, MORE RAIN URGENTLY NEEDED
BELOW -4 NOT ENOUGH RAIN, STILL EXTREMELY DRY
UNSHADED AREAS
INDEX DECREASED
ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET
2 TO 3 MORE DRY WEATHER NEEDED, WORK DELAYED
1 TO 2 FAVORABLE EXCEPT STILL TOO WET IN SPOTS
0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 TO -1 TOPSOIL MOISTURE SHORT, GERMINATION SLOW
-1 TO -2 ABNORMALLY DRY, PROSPECTS DETERIORATING
-2 TO -3 EXCESSIVELY DRY, YIELD PROSPECTS REDUCED
-3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DRYNESS
BELOW -4 EXTREMELY DRY, MOST CROPS RUINED
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY DATA


U.S. Drought Monitor
June 15, 2004
Valid 8 a.m. EDT
Drought Intensity:
D0 Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Drought Impact Types:
Delineates dominant impacts
A = Agricultural (crops, pastures, grasslands)
H = Hydrological (water)
(No type = Both impacts)
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
http://drought.unl.edu/dm
USDA
Released Thursday, June 17, 2004
Author: Brad Rippey, U.S. Department of Agriculture


U.S. Seasonal Drought Outlook
Through September 2004
Released June 17, 2004
DEVELOPMENT LIKELY
SOME IMPROVEMENT
PERSIST
SOME IMPROVEMENT
IMPROVEMENT
SOME IMPROVEMENT
KEY:
Drought to persist or intensify
Drought ongoing, some improvement
Drought likely to improve, impacts ease
Drought development likely
Depicts general, large-scale trends based on subjectively derived probabilities guided by numerous indicators, including short and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more that a few days in advance, so use caution if using this outlook for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are schmatically approximated from the Drought Monitor (D1 to D4). For weekly drought updates, see the latest Drought Monitor map and text.

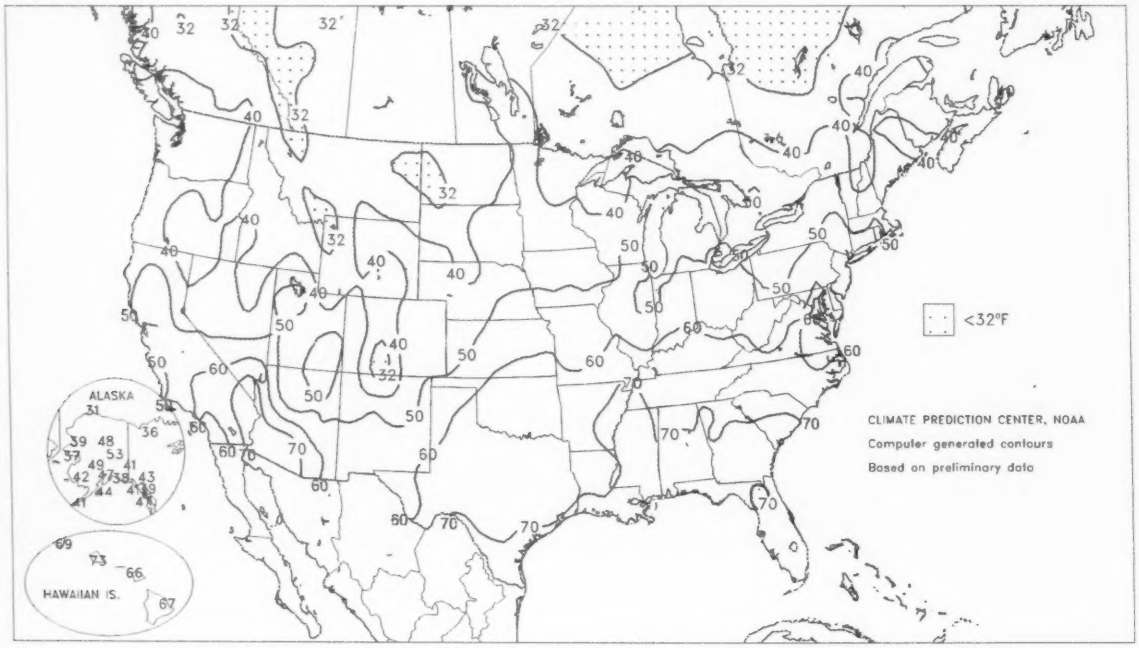
Extreme Maximum Temperature (°F)

JUN 13 - 19, 2004



Extreme Minimum Temperature (°F)

JUN 13 - 19, 2004

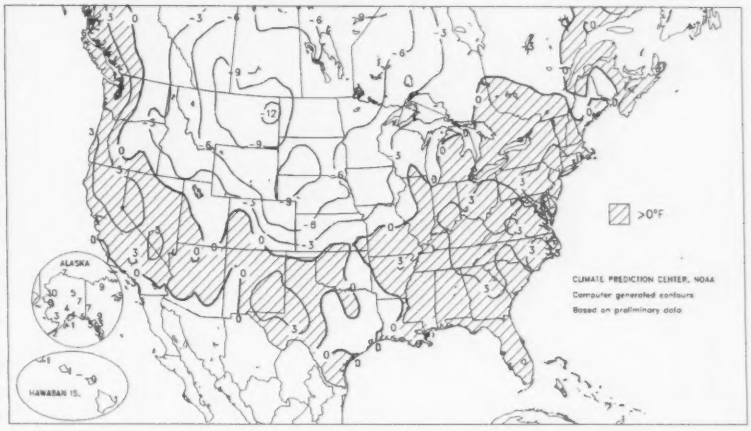


(Continued from front cover)

dryland summer crops with much-needed moisture. Showery weather also prevailed across the **South**, maintaining adequate to locally excessive moisture reserves from the **Delta westward** and providing additional drought relief to **Southeastern** pastures and summer crops. In the **West**, widespread precipitation was confined to **Wyoming** and **Colorado**, where rain boosted topsoil moisture but provided little relief from a multi-year, hydrological drought. Dry weather prevailed elsewhere **west of the Rockies**, accompanied by a late-week return to record warmth in the **Pacific Northwest**.

Departure of Average Temperature from Normal (°F)

JUN 13 - 19, 2004



Cooler weather expanded to encompass the majority of the **Plains** and **Midwest**. Weekly temperatures ranged from 6 to 12°F below normal across the **northern half of the Plains** and averaged as much as 6°F below normal in the **northwestern Corn Belt**. In contrast, warm, humid conditions prevailed in the **East**, where readings generally ranged from 2 to 6°F above normal. Elsewhere, hot weather overspread the **Pacific Northwest (west of the Cascades)**, boosting temperatures as much as 6°F above normal. Temperatures peaked at 100°F or higher early in the week as far north as **western Kansas** but dropped significantly thereafter. Hot weather persisted through week's end, however, in the **Southeast**. In contrast, temperatures failed to reach 70°F for the entire week in parts of **Montana**. A late-season freeze struck parts of the **northern Plains** on June 18, but the cold weather was not expected to adversely affect spring-sown small grains or cause significant harm to **Montana's** winter wheat crop. Scattered frost was reported in the **northwestern Corn Belt** on June 19, but temperatures remained above the freezing mark (32°F).

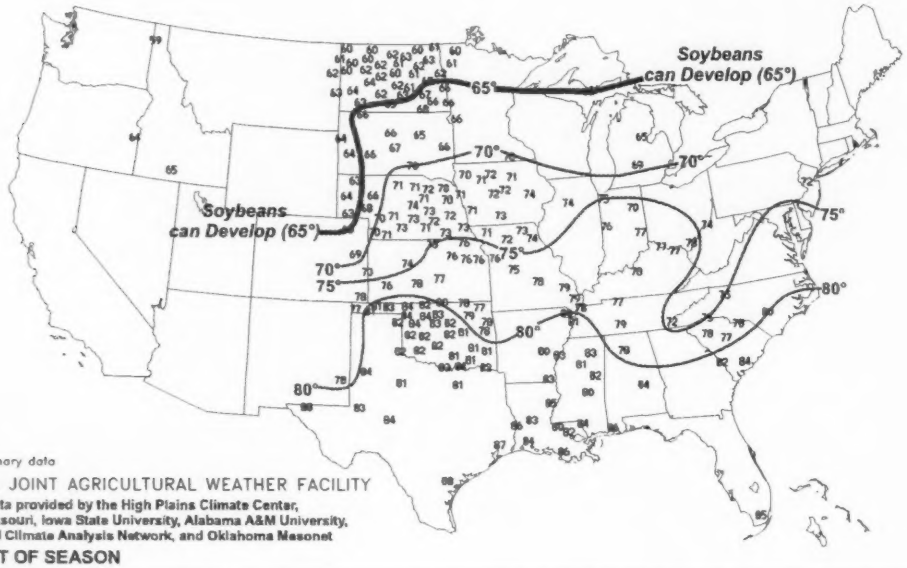
Hot weather lingered early in the week across the **Four Corners States**, where daily-record highs on June 14 included 88°F in **Alamosa, CO**, and 99°F in **Canyon de Chelly, AZ.** A day later in **New Mexico**, **Roswell** posted a daily-record high of 104°F. Farther north, chilly weather arrived across the **interior Northwest** by midweek. Record lows for June 16 included 28°F in **Butte, MT**, and 35°F in **Pullman, WA.** From June 17-19, **Williston, ND**, notched three consecutive daily-record lows (34, 29, and 33°F). Record lows for June 18 were also established in locations such as **Dickinson, ND** (30°F), **Miles City, MT** (34°F), and **Bismarck, ND** (35°F). **Bismarck** (39°F) also set a record low the following day, along with **Huron, SD** (38°F), **Casper, WY** (39°F), and **Goodland, KS** (44°F). Meanwhile, record warmth arrived in the **Pacific Northwest**, where daily-record highs in Oregon on June 17 included 90°F in **Newport** and 89°F in **Astoria**. Elsewhere, hot weather continued across the **South**, resulting in a daily-record high (98°F on June 18) at **New Orleans' Audubon Park**.

Early in the week, locally heavy showers peppered the **southern half of the Nation**. Daily-record totals for June 13 included 6.07 inches in **Jacksonville, FL**, 3.58 inches in **Houston, TX**, 2.11 inches in **Wichita, KS**, and 2.00 inches in **Springfield, MO.** Another round of heavy rain struck **eastern Texas** on June 15, dropping 2.74 inches in **College Station** and resulting in another daily record (2.63 inches) in **Houston**. Thunderstorms also developed on the **central High Plains**, where **Colorado Springs, CO** (1.36 inches on June 15), netted a daily-record total. Farther north, a final period of torrential rain (3.58 inches on June 16) capped the wettest 31-day period on record in **Sioux Falls, SD.** From May 17 - June 16, **Sioux Falls'** total of 12.74 inches edged its 31-day record of 12.23 inches, established from June 12 - July 12, 1909. The 31-day total also approached **Sioux Falls'** May-August normal rainfall of 12.82 inches. In contrast, showers provided only limited drought relief across the **northern half of the High Plains**. Despite recent 1- to 2-inch rainfall totals, precipitation for the 356-day period from July 1, 2003 - June 20, 2004, was still less than 50 percent of normal in locations such as **Miles City, MT** (5.44 inches, or 43 percent of normal), **Denver, CO** (6.87 inches, or 45 percent), and **Scottsbluff, NE** (7.24 inches, or 47 percent).

Locally heavy showers dotted **Hawaii**, primarily across the **western islands** early in the week and again toward week's end. **Lihue, Kauai**, netted a daily-record total of 0.81 inch on June 19, boosting its month-to-date rainfall to 2.31 inches (196 percent of normal). Elsewhere on **Kauai, Wainiha** measured a weekly sum of 6.12 inches, including 24-hour totals of 1.98 inches on June 13-14 and 2.07 inches on June 18-19. Farther north, a record-setting warm spell arrived across parts of **southeastern and interior Alaska**, helping to lift weekly temperatures as much as 10°F above normal. The parade of **Alaskan** daily records started in **Barrow** with a high of 59°F on June 16. The week ended with consecutive daily-record highs at several locations in **southeastern Alaska**, including **Juneau** (84 and 85°F), **Haines** (81 and 83°F), and **Petersburg** (81 and 82°F). On June 18, **Annette Island** achieved 89°F, tying its monthly record established on June 6, 1958, and June 9, 1969, followed the next day by an all-time record high of 93°F. **Annette Island's** former all-time record was 90°F, set on August 8, 1960. Month-to-date (June 1-20) **Alaskan** rainfall totaled just 1.15 inches (52 percent of normal) in **Juneau** but reached 7.42 inches (198 percent) in **Kodiak**.

Average Soil Temperature (°F, 4" Bare)

JUN 13 - 19, 2004



Based on preliminary data

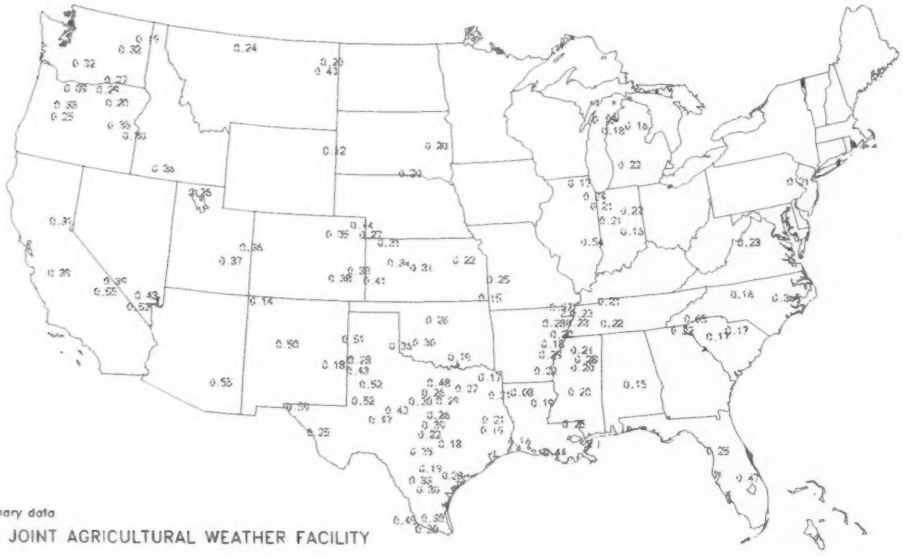
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Supplemental data provided by the High Plains Climate Center, University of Missouri, Iowa State University, Alabama A&M University, USDA/NRCS Soil Climate Analysis Network, and Oklahoma Mesonet

LAST CHART OF SEASON

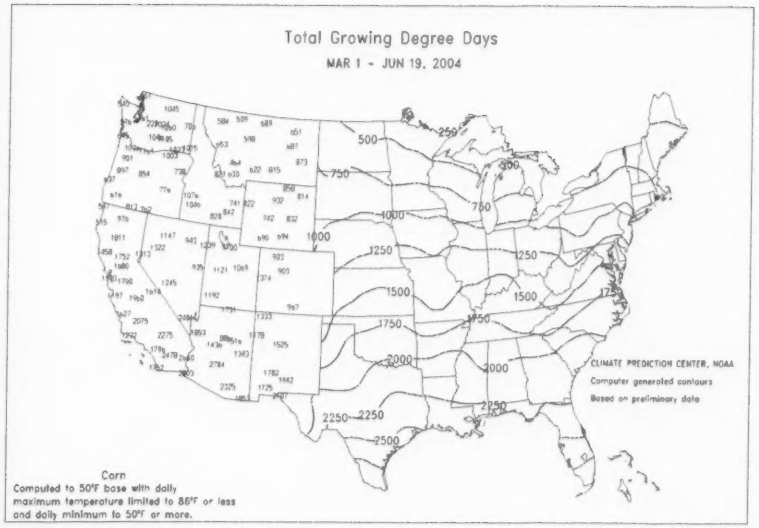
Average Pan Evaporation (Inches)

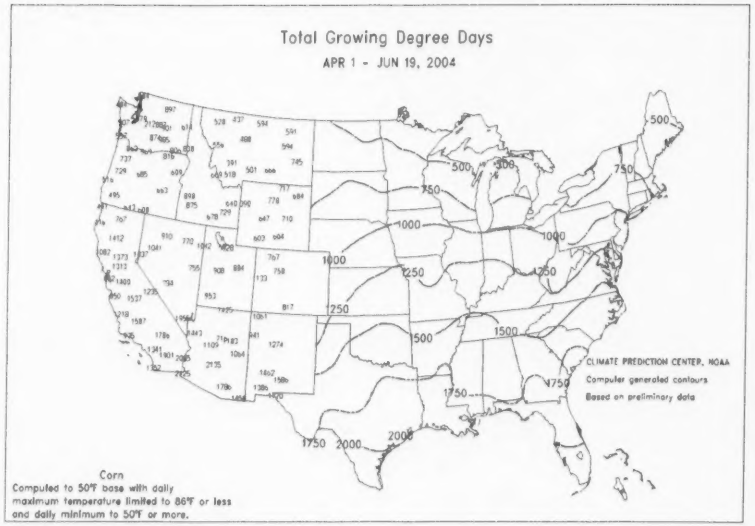
JUN 13 - 19, 2004

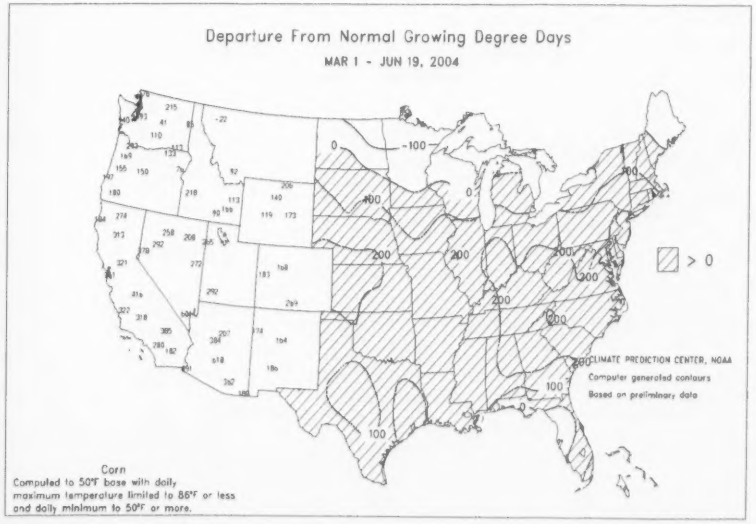


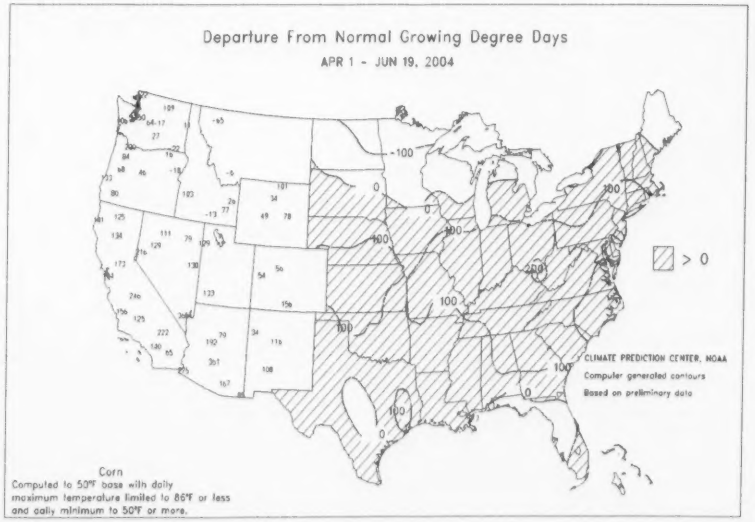
Based on preliminary data

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY


Total Growing Degree Days
MAR 1 - JUN 19, 2004
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
Corn
Computed to 50°F base with daily
maximum temperature limited to 86°F or less
and daily minimum to 50°F or more.


Total Growing Degree Days
APR 1 - JUN 19, 2004
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
Corn
Computed to 50°F base with daily
maximum temperature limited to 86°F or less
and daily minimum to 50°F or more.


Departure From Normal Growing Degree Days
MAR 1 - JUN 19, 2004
> 0
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
Corn
Computed to 50°F base with daily,
maximum temperature limited to 86°F or less
and daily minimum to 50°F or more.


Departure From Normal Growing Degree Days
APR 1 - JUN 19, 2004
> 0
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
Corn
Computed to 50°F base with daily
maximum temperature limited to 86°F or less
and daily minimum to 50°F or more.

Agricultural Weather Data Compiled by USDA's Stoneville Field Office

Weather Data for the Week Ending June 19, 2004

Data provided by the Mississippi State Delta Research and Extension Center (DREC) and the University of Missouri Extension Commercial Agriculture Program.

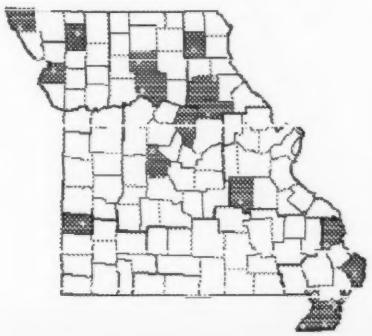
STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							4-INCH SOIL TEMP, °F		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
MISSISSIPPI																				
	INDIANOLA 1S	89	72	93	70	81	-	1.78	-	1.00	2.81	-	24.10	-	-	-	3	0	4	1
	INVERNESS 5E	88	73	92	71	80	-	0.77	-	0.36	1.90	-	-	-	-	-	2	0	7	0
	LYON	89	73	95	71	81	-	0.65	-	0.38	1.08	-	25.90	-	88	78	3	0	3	0
	MACON	89	73	92	71	81	-	0.97	-	0.60	4.86	-	26.68	-	86	78	4	0	5	1
	ONWARD	88	72	91	71	80	-	2.49	-	1.19	5.32	-	29.15	-	-	-	2	0	4	2
	PERTHSHIRE	88	73	94	71	81	-	1.08	-	0.54	1.22	-	30.03	-	91	80	3	0	2	2
	SCOTT	88	73	93	72	81	-	0.59	-	0.34	0.86	-	23.98	-	92	84	2	0	5	0
	SIDON	90	73	95	70	81	-	1.28	-	0.78	2.68	-	25.17	-	93	78	2	0	4	1
	STARKVILLE	88	72	91	71	80	2	1.80	0.89	1.04	5.81	218	24.92	84	-	-	2	0	5	1
	TUNICA 1W	88	73	93	71	80	-	1.96	-	1.26	2.75	-	-	-	87	79	3	0	4	2
	VANCE	87	71	91	69	79	-	1.16	-	0.78	1.57	-	27.74	-	83	79	2	0	4	1
	VERONA	-	-	-	-	-	-	1.12	-	0.30	2.79	-	-	-	-	-	-	-	-	-
	STONEVILLE [X]	91	73	95	71	82	2	0.43	-0.48	0.22	1.61	59	26.11	90	91	81	4	0	3	0
MISSOURI																				
NW	CORNING	81	62	88	52	71	-2	0.55	-0.51	0.34	1.51	52	13.48	90	-	-	0	0	5	0
	ALBANY	79	62	87	55	70	-3	2.10	1.34	0.94	6.20	236	20.63	134	75	69	0	0	6	1
	ST. JOSEPH	79	62	86	55	70	-2	0.91	-0.17	0.50	3.05	98	18.15	115	-	-	0	0	3	1
NC	BRUNSWICK	79	62	86	53	70	-2	1.13	0.10	0.51	2.97	95	17.61	109	75	69	0	0	4	1
	LINNEUS	80	64	88	56	71	-2	2.43	1.45	1.37	4.26	140	17.21	100	82	71	0	0	5	2
NE	NOVELTY	79	63	87	53	70	-3	0.35	-0.44	0.21	2.06	87	13.52	84	77	69	0	0	4	0
	MONROE CITY	80	63	88	51	71	-3	0.28	-0.34	0.23	0.98	40	10.26	60	78	70	0	0	2	0
C	AUXVASSE	83	63	89	55	72	-1	0.61	-0.16	0.46	1.56	60	16.52	91	80	69	0	0	4	0
	SANBORN FIELD	83	65	90	57	73	-1	0.59	-0.24	0.37	1.44	53	19.64	103	82	72	1	0	3	0
	COLUMBIA	82	64	89	56	72	-1	0.89	0.07	0.45	1.45	54	20.85	110	-	-	0	0	4	0
	VERSAILLES	84	64	90	57	74	1	1.16	0.47	0.83	2.10	82	-	-	79	72	1	0	2	1
EC	COOK STATION	86	64	92	57	73	0	1.91	1.22	1.42	3.53	136	20.6	102	83	74	1	0	4	1
SW	LAMAR	85	65	91	60	74	0	2.11	0.96	1.28	3.53	108	22.97	108	79	71	1	0	3	2
SE	DELTA	86	69	91	64	77	1	0.62	-0.14	0.37	1.14	49	16.23	73	86	73	1	0	4	0
	CHARLESTON	86	70	89	66	77	1	1.02	0.09	0.63	1.42	55	15.03	64	85	74	0	0	3	1
	GLENNONVILLE	87	71	93	67	78	1	0.71	-0.04	0.49	1.10	48	15.06	71	91	80	2	0	3	0
	CLARKTON	87	71	92	67	78	1	0.37	-0.39	0.33	2.18	89	17.89	81	87	75	2	0	4	0
	PORTAGEVILLE DC	87	71	93	68	78	1	0.79	-0.08	0.63	2.21	80	24.06	102	89	75	2	0	3	1
	PORTAGEVILLE LF	86	72	93	69	78	1	0.72	-0.08	0.48	1.60	61	22.95	98	88	74	1	0	5	0
	STEELE	88	72	93	70	79	2	0.76	0.03	0.55	1.07	39	23.86	96	88	78	2	0	3	1
	CARDWELL	88	72	93	70	79	2	1.07	0.45	0.58	1.13	50	22.26	91	88	76	3	0	2	1

Compiled by USDA/OCE/WAOB's Stoneville Field Office.
[X] Based on 1971-2000 normals.
- Sufficient data not available.
NW = Northwest; NC = North Central; NE = Northeast; C = Central; EC = East Central; SW = Southwest; SE = Southeast.

Weather and Crop Summary for the Mississippi Delta: A hot, humid airmass helped to spark scattered showers and thunderstorms, boosted topsoil moisture, and aided summer crops. Some soybeans were blooming and setting pods, while cotton continued to square. Corn was tasseling, meaning that appropriate irrigation and moisture levels were critical for maintaining high yield potential. Crops were monitored for insects and diseases during the spell of hot, rainy weather.

Note: For information on the weather stations (above) in the Missouri Bootheel and recently added stations elsewhere in the State, please visit:

http://agebb.missouri.edu/weather/stations/index.htm



National Weather Data for Selected Cities

Weather Data for the Week Ending June 19, 2004

Data Provided by Climate Prediction Center (301-763-8000, Ext. 7503)

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	87	72	98	71	79	2	1.84	1.02	1.15	3.82	162	23.67	86	98	65	3	0	5	2
	HUNTSVILLE	87	71	89	70	79	3	0.41	-0.52	0.27	0.55	21	22.77	77	93	70	0	0	4	0
	MOBILE	89	75	94	72	82	2	4.91	3.82	2.34	10.20	333	30.62	95	88	67	5	0	5	3
	MONTGOMERY	91	75	96	74	83	4	3.83	2.89	1.32	5.40	226	24.68	89	89	62	5	0	6	3
AK	ANCHORAGE	67	51	74	47	59	4	0.73	0.49	0.47	0.78	128	4.87	125	88	67	0	0	2	0
	BARROW	51	36	62	31	43	7	0.30	0.24	0.17	0.30	250	0.88	129	94	81	0	1	2	0
	FAIRBANKS	79	56	87	53	68	8	0.00	-0.33	0.00	0.32	40	3.32	118	74	47	0	0	0	0
	JUNEAU	69	46	85	39	58	4	0.24	-0.53	0.12	1.16	56	23.56	113	95	68	0	0	3	0
	KODIAK	52	46	58	44	49	-1	3.06	1.83	1.30	7.47	214	42.45	123	98	90	0	0	7	2
	NOME	54	42	60	37	48	0	0.32	0.06	0.16	0.57	92	5.02	117	95	84	0	0	3	0
AZ	FLAGSTAFF	80	42	83	38	61	0	0.00	-0.06	0.00	0.00	0	4.38	46	42	11	0	0	0	0
	PHOENIX	105	77	107	74	91	2	0.00	0.00	0.00	0.00	0	4.02	131	21	12	7	0	0	0
	TUCSON	101	68	104	66	84	-1	0.00	-0.03	0.00	0.00	0	3.60	111	23	10	7	0	0	0
	YUMA	104	76	106	73	90	1	0.00	0.00	0.00	0.00	0	1.60	150	27	19	7	0	0	0
AR	FORT SMITH	87	70	92	67	78	0	3.12	2.16	2.33	5.03	180	23.03	110	94	64	2	0	3	2
	LITTLE ROCK	87	73	93	70	80	1	0.97	0.08	0.57	1.53	61	23.42	94	98	65	1	0	3	1
CA	BAKERSFIELD	94	67	100	63	80	2	0.00	0.00	0.00	0.00	0	2.77	61	49	35	7	0	0	0
	FRESNO	94	65	101	61	80	4	0.00	-0.03	0.00	0.00	0	4.20	54	64	37	6	0	0	0
	LOS ANGELES	72	62	75	61	67	0	0.00	0.00	0.00	0.00	0	5.97	64	81	70	0	0	0	0
	REDDING	95	70	100	61	82	6	0.00	-0.12	0.00	0.08	15	17.17	79	48	37	7	0	0	0
	SACRAMENTO	90	59	100	56	75	3	0.00	-0.03	0.00	0.00	0	7.90	67	80	29	4	0	0	0
	SAN DIEGO	70	65	71	64	67	-1	0.00	0.00	0.00	0.00	0	3.96	52	73	67	0	0	0	0
	SAN FRANCISCO	73	56	83	53	65	4	0.00	0.00	0.00	0.00	0	8.67	65	83	67	0	0	0	0
	STOCKTON	91	58	99	54	75	1	0.00	0.00	0.00	0.00	0	6.53	73	79	41	4	0	0	0
CO	ALAMOSA	84	39	88	32	62	2	0.00	-0.11	0.00	0.00	0	2.41	97	77	18	0	1	0	0
	CO SPRINGS	74	50	89	45	62	-3	1.93	1.41	1.36	2.49	167	7.15	99	82	46	0	0	5	1
	DENVER INTL	72	48	90	41	60	-6	0.82	0.49	0.50	0.93	87	4.58	74	84	57	1	0	4	1
	GRAND JUNCTION	90	56	97	50	73	1	0.03	-0.03	0.02	0.03	13	4.00	96	48	21	4	0	2	0
	PUEBLO	83	54	96	44	68	-2	0.71	0.43	0.31	0.85	108	7.41	146	73	52	3	0	7	0
CT	BRIDGEPORT	81	65	87	60	73	5	0.23	-0.57	0.20	1.00	45	18.94	90	91	67	0	0	3	0
	HARTFORD	82	61	90	50	72	3	0.45	-0.42	0.25	1.02	41	15.76	74	89	51	1	0	4	0
DC	WASHINGTON	85	70	92	62	78	3	0.79	0.10	0.76	2.98	152	15.55	86	87	61	1	0	2	1
DE	WILMINGTON	84	66	89	55	75	3	2.73	1.93	1.21	6.27	285	23.02	115	96	59	0	0	4	3
FL	DAYTONA BEACH	90	74	95	72	82	2	0.15	-1.22	0.13	2.83	80	11.37	60	94	56	2	0	3	0
	JACKSONVILLE	90	72	92	70	81	2	6.83	5.55	6.15	7.48	232	18.23	88	96	63	5	0	3	2
	KEY WEST	88	80	89	78	84	0	0.13	-0.96	0.09	0.18	6	9.38	66	86	72	0	0	2	0
	MIAMI	91	78	92	77	84	1	0.67	-1.41	0.59	4.20	75	17.77	85	83	58	6	0	2	1
	ORLANDO	92	74	94	71	83	2	2.90	1.12	2.16	8.22	185	21.05	111	92	55	7	0	3	1
	PENSACOLA	89	75	94	73	82	1	4.15	2.65	3.09	6.37	168	21.39	75	95	72	3	0	3	2
	TALLAHASSEE	91	73	95	71	82	1	4.02	2.40	2.32	7.87	186	23.07	79	94	72	5	0	4	2
	TAMPA	91	75	93	73	83	1	2.64	1.31	2.40	3.69	112	16.06	102	91	58	7	0	2	1
	WEST PALM	91	77	93	76	84	3	0.15	-1.66	0.14	1.81	38	13.74	58	82	63	6	0	2	0
GA	ATHENS	90	71	93	70	81	4	0.40	-0.49	0.20	1.82	75	11.90	50	94	70	4	0	5	0
	ATLANTA	86	71	89	70	79	2	1.41	0.61	0.68	2.24	107	16.11	65	93	68	0	0	5	1
	AUGUSTA	91	72	96	70	82	4	0.73	-0.26	0.38	5.23	199	17.78	81	95	61	5	0	4	0
	COLUMBUS	90	73	95	71	81	1	2.46	1.68	1.05	2.92	143	17.55	72	98	57	4	0	5	2
	MACON	93	73	96	72	83	5	2.02	1.20	0.65	2.04	97	16.81	74	91	53	6	0	6	2
	SAVANNAH	88	72	94	70	80	1	4.58	3.27	1.96	4.88	144	15.98	77	97	75	2	0	5	3
HI	HILO	83	68	85	67	76	1	1.04	-0.65	0.59	3.89	92	81.05	140	83	72	0	0	7	1
	HONOLULU	87	74	88	73	81	1	0.20	0.12	0.08	0.23	88	19.02	209	80	68	0	0	5	0
	KAHULUI	86	68	88	66	77	-1	0.00	-0.03	0.00	0.02	22	24.26	222	81	69	0	0	0	0
	LIHUE	84	71	85	69	77	-1	1.50	1.11	0.84	2.42	212	19.72	107	87	79	0	0	7	1
ID	BOISE	80	52	87	44	66	-2	0.00	-0.15	0.00	0.00	0	6.55	94	56	29	0	0	0	0
	LEWISTON	77	51	87	44	64	-2	0.42	0.17	0.41	1.23	162	9.19	135	65	39	0	0	2	0
	POCATELLO	75	47	80	40	61	-1	0.33	0.15	0.17	0.90	153	6.84	100	73	40	0	0	3	0
IL	CHICAGO/O'HARE	79	61	83	48	70	1	0.23	-0.62	0.23	1.79	78	14.55	95	85	57	0	0	1	0
	MOLINE	80	64	87	53	72	0	0.94	-0.15	0.94	1.64	55	18.93	111	92	65	0	0	1	1
	PEORIA	80	65	84	54	73	1	0.12	-0.75	0.07	2.14	91	14.18	88	90	57	0	0	4	0
	ROCKFORD	79	62	85	52	71	2	0.16	-0.97	0.16	3.01	100	18.29	116	89	63	0	0	1	0
	SPRINGFIELD	80	64	85	53	72	-1	2.20	1.34	2.01	3.19	132	15.17	93	90	67	0	0	2	1
IN	EVANSVILLE	85	69	89	61	77	2	1.03	0.11	0.78	1.67	64	18.62	83	91	66	0	0	5	1
	FORT WAYNE	81	64	86	53	73	3	2.11	1.17	1.43	4.82	190	18.43	110	94	64	0	0	4	1
	INDIANAPOLIS	84	67	88	54	75	3	2.55	1.61	1.99	4.18	163	24.02	127	97	65	0	0	3	1
	SOUTH BEND	79	62	84	48	71	1	0.52	-0.47	0.40	4.60	176	16.79	100	91	68	0	0	4	0
IA	BURLINGTON	82	65	88	54	73	0	0.61	-0.41	0.60	1.54	56	13.11	79	88	51	0	0	2	1
	CEDAR RAPIDS	78	61	84	48	69	-2	0.88	-0.17	0.70	1.69	60	15.79	111	93	54	0	0	4	1
	DES MOINES	77	61	85	54	69	-3	1.27	0.20	0.64	2.25	77	21.99	145	90	67	0	0	4	2
	DUBUQUE	76	60	83	50	68	-1	1.07	0.13	0.89	2.36	90	17.38	112	91	65	0	0	3	1
	SIOUX CITY	75	56	86	44	66	-5	1.83	1.01	1.24	3.94	171	15.90	132	90	60	0	0	4	1
	WATERLOO	78	58	85	44	68	-3	0.15	-0.98	0.12	1.88	62	20.58	142	87	59	0	0	2	0
KS	CONCORDIA	82	61	92	55	72	-2	1.61	0.73	0.94	2.14	86	13.29	103	87	59	2	0	4	2
	DODGE CITY	84	60	102	52	72	-3	1.88	1.16	0.60	2.61	132	8.42	81	92	50	4	0	5	2
	GOODLAND	75	53	91	44	64	-6	1.58	0.85	0.90	2.69	129	7.67	84	91	69	2	0	6	1
	TOPEKA	82	64	93	59	73	-2	2.27	1.14	1.50	4.30	135	17.11	108	88	64	1	0	5	1

Based on 1971-2000 normals

*** Not Available

Weather Data for the Week Ending June 19, 2004

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN. SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL IN. SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	WICHITA	85	66	94	61	75	-1	4.46	3.49	2.11	5.84	212	19.25	137	99	75	1	0	5	3
KY	JACKSON	82	68	85	62	75	3	2.61	1.55	2.28	4.25	143	30.92	131	99	70	0	0	5	1
	LEXINGTON	83	67	86	60	75	2	1.22	0.17	0.51	3.95	138	27.72	124	96	76	0	0	5	2
	LOUISVILLE	87	71	90	64	79	4	0.51	-0.32	0.35	1.44	61	26.85	122	93	61	1	0	2	0
	PADUCAH	85	69	90	64	77	2	3.29	2.24	1.53	4.12	151	22.08	92	94	62	1	0	4	3
LA	BATON ROUGE	91	74	93	73	83	3	0.57	-0.67	0.31	3.87	118	38.91	127	98	57	6	0	2	0
	LAKE CHARLES	90	73	94	70	82	1	2.90	1.51	2.64	5.57	143	41.66	161	96	61	4	0	5	1
	NEW ORLEANS	90	75	95	72	82	1	4.43	2.77	2.62	9.64	231	47.02	155	92	68	3	0	4	2
	SHREVEPORT	88	71	93	69	79	-1	1.42	0.25	0.56	7.93	246	35.23	136	92	62	4	0	5	1
ME	CARIBOU	71	48	77	39	60	-1	1.39	0.65	1.12	2.44	120	11.82	76	93	47	0	0	4	1
	PORTLAND	75	55	87	46	65	2	0.05	-0.69	0.03	1.14	56	16.10	75	92	55	0	0	2	0
MD	BALTIMORE	85	67	89	54	76	4	1.24	0.48	0.92	3.96	185	20.88	107	89	59	0	0	4	1
MA	BOSTON	79	61	89	54	70	1	0.10	-0.64	0.09	1.23	61	19.73	99	85	54	0	0	2	0
	WORCESTER	77	59	84	48	68	3	0.24	-0.67	0.20	1.22	48	17.30	78	94	53	0	0	4	0
MI	ALPENA	75	50	82	42	62	0	0.97	0.39	0.80	1.53	97	11.08	94	97	55	0	0	3	1
	GRAND RAPIDS	79	62	83	51	70	2	0.25	-0.61	0.17	1.30	58	20.47	134	91	62	0	0	4	0
	HOUGHTON LAKE	76	53	85	45	65	2	1.05	0.37	0.85	1.25	67	16.16	139	89	57	0	0	3	1
	LANSING	79	60	84	47	70	3	0.74	-0.13	0.36	2.12	93	18.05	134	95	66	0	0	4	0
	MUSKEGON	74	56	81	45	65	0	0.21	-0.38	0.18	2.63	157	20.76	152	97	76	0	0	2	0
	TRAVERSE CITY	75	55	89	48	65	0	0.48	-0.32	0.28	0.88	44	15.21	110	93	53	0	0	2	0
MN	DULUTH	69	47	77	39	58	-2	0.04	-0.97	0.02	1.41	54	11.85	105	85	57	0	0	3	0
	INT'L FALLS	66	41	73	34	53	-9	0.15	-0.81	0.09	1.16	47	8.49	96	94	52	0	0	4	0
	MINNEAPOLIS	74	58	82	47	66	-3	0.00	-1.02	0.00	2.73	100	14.60	122	82	50	0	0	0	0
	ROCHESTER	74	55	80	44	65	-2	1.85	0.92	1.85	7.88	324	21.02	168	85	57	0	0	1	1
	ST. CLOUD	74	53	81	42	63	-3	0.48	-0.61	0.22	3.04	105	13.60	125	90	43	0	0	4	0
MS	JACKSON	90	72	94	71	81	2	1.26	0.40	0.54	2.74	120	26.90	93	94	60	4	0	6	1
	MERIDIAN	89	73	93	71	81	2	1.60	0.72	1.13	3.28	142	23.66	76	92	61	3	0	5	1
	TUPELO	87	71	92	70	79	2	1.96	0.87	0.60	3.02	96	27.52	92	95	73	1	0	7	1
MO	COLUMBIA	82	64	89	56	73	0	0.94	0.03	0.66	2.72	106	22.29	119	94	64	0	0	3	1
	KANSAS CITY	79	64	89	59	72	-2	0.34	-0.65	0.12	3.92	140	16.97	103	93	72	0	0	4	0
	SAINT LOUIS	86	70	93	63	78	2	0.37	-0.48	0.23	0.71	31	21.57	119	91	66	1	0	3	0
	SPRINGFIELD	85	65	90	60	75	1	2.35	1.16	2.22	3.10	98	20.92	103	95	67	1	0	4	1
MT	BILLINGS	64	48	74	44	56	-10	0.09	-0.32	0.04	1.67	136	4.93	62	73	44	0	0	3	0
	BUTTE	61	37	66	28	49	-7	0.18	-0.29	0.17	0.59	44	4.50	72	82	33	0	1	2	0
	GLASGOW	67	42	73	34	54	-11	0.13	-0.38	0.06	1.87	136	7.20	146	92	49	0	0	4	0
	GREAT FALLS	62	41	68	36	52	-9	0.74	0.24	0.63	2.23	149	6.79	89	85	40	0	0	2	1
	HAVRE	66	41	70	35	54	-9	0.11	-0.32	0.10	1.77	148	6.38	117	86	46	0	0	2	0
	KALISPELL	67	41	72	33	54	-4	0.26	-0.28	0.13	0.67	45	6.44	76	82	49	0	0	4	0
	MISSOULA	68	46	73	36	56	-5	0.33	-0.05	0.31	1.03	90	8.11	116	77	48	0	0	3	0
NE	GRAND ISLAND	76	56	91	51	66	-6	0.77	-0.07	0.56	0.80	33	8.14	66	90	56	1	0	3	1
	LINCOLN	79	59	86	52	69	-4	0.60	-0.18	0.34	1.89	84	10.66	83	87	60	0	0	3	0
	NORFOLK	75	56	86	46	66	-5	1.21	0.23	1.06	2.42	90	16.14	129	90	60	0	0	3	1
	NORTH PLATTE	72	52	91	45	62	-7	2.92	2.20	2.32	4.12	207	7.95	84	91	52	1	0	4	1
	OMAHA	77	59	84	50	68	-5	0.45	-0.44	0.29	2.31	93	18.54	137	89	60	0	0	4	0
	SCOTTSBLUFF	71	46	91	43	59	-9	0.98	0.37	0.44	1.07	64	3.42	41	87	61	1	0	4	0
	VALENTINE	70	49	85	36	60	-8	0.73	0.06	0.30	3.10	169	9.80	110	90	55	0	0	4	0
NV	ELY	82	42	88	39	62	2	0.46	0.34	0.31	0.46	105	3.01	58	70	26	0	0	2	0
	LAS VEGAS	101	77	103	73	89	3	0.00	0.00	0.00	0.00	0	2.61	115	31	21	7	0	0	0
	RENO	88	54	89	51	71	6	0.00	-0.09	0.00	0.00	0	4.10	97	56	25	0	0	0	0
	WINNEMUCCA	84	47	87	40	65	0	0.00	-0.14	0.00	0.21	46	2.83	60	45	19	0	0	0	0
NH	CONCORD	81	56	87	43	69	4	0.07	-0.62	0.04	1.34	70	16.18	97	91	45	0	0	4	0
NJ	NEWARK	87	67	92	58	77	5	0.22	-0.51	0.22	0.76	37	17.35	80	77	48	3	0	1	0
NM	ALBUQUERQUE	93	63	95	58	78	2	0.00	-0.14	0.00	0.00	0	4.93	164	26	10	7	0	0	0
NY	ALBANY	80	60	85	50	70	3	0.08	-0.79	0.07	1.10	46	12.63	74	85	54	0	0	2	0
	BINGHAMTON	76	58	80	48	67	3	0.28	-0.61	0.26	0.75	32	14.21	82	90	70	0	0	3	0
	BUFFALO	76	60	81	50	68	2	0.87	-0.03	0.38	1.57	64	18.44	106	93	63	0	0	4	0
	ROCHESTER	76	58	82	47	67	1	1.17	0.37	0.56	2.07	98	15.64	107	94	71	0	0	6	1
	SYRACUSE	77	59	85	51	68	2	0.79	-0.07	0.36	1.69	76	18.30	109	90	58	0	0	4	0
NC	ASHEVILLE	81	66	86	64	74	4	1.99	0.99	1.31	4.01	142	17.30	75	95	70	0	0	5	1
	CHARLOTTE	85	70	91	65	77	0	2.88	2.11	1.63	3.53	164	13.73	66	96	66	3	0	4	2
	GREENSBORO	86	70	92	64	78	4	0.44	-0.34	0.19	0.79	37	10.27	51	93	62	3	0	4	0
	HATTERAS	83	74	88	66	79	4	0.04	-0.81	0.04	1.06	44	13.79	57	83	61	0	0	1	0
	RALEIGH	88	71	96	62	80	5	0.25	-0.50	0.21	1.79	86	14.91	74	89	62	4	0	2	0
	WILMINGTON	87	71	95	62	79	2	0.08	-1.14	0.08	1.80	58	16.32	71	95	60	2	0	1	0
ND	BISMARCK	72	46	76	35	59	-6	0.05	-0.56	0.03	2.67	167	7.00	99	85	42	0	0	3	0
	DICKINSON	69	42	76	30	56	-8	0.05	-0.75	0.04	0.50	24	4.09	54	84	32	0	1	2	0
	FARGO	71	48	77	41	60	-6	0.40	-0.43	0.33	0.97	43	10.32	118	87	46	0	0	2	0
	GRAND FORKS	69	46	77	37	58	-8	0.14	-0.58	0.10	0.55	29	9.28	124	92	46	0	0	4	0
	JAMESTOWN	69	47	73	40	58	-8	0.28	-0.43	0.21	1.68	92	11.21	151	93	45	0	0	4	0
	WILLISTON	66	39	72	29	53	-11	0.04	-0.51	0.03	1.79	125	7.21	120	92	53	0	1	2	0
OH	AKRON-CANTON	79	62	85	48	71	3	3.18	2.38	1.02	5.47	251	23.33	134	96	70	0	0	6	3
	CINCINNATI	84	68	86	59	76	4	0.26	-0.76	0.16	2.78	97	22.89	109	92	65	0	0	4	0
	CLEVELAND	79	64	85	50	72	4	1.11	0.20	0.53	2.22	92	19.90	117	95	67	0	0	7	1
	COLUMBUS	82	67	86	55	75	3	1.36	0.42	0.75	5.28	214	25.57	148	90	68	0	0	6	1
	DAYTON	82	67	86	54	74	3	0.90	-0.08	0.84	1.62	61	22.04	116	95	62	0	0	4	1
	MANSFIELD	79	63	85	49	71	4	2.74	1.69	1.97	6.22	219	24.93	127	98	62	0	0	5	2

Based on 1971-2000 normals

*** Not Available

Weather Data for the Week Ending June 19, 2004

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN. SINCE Jan 1	PCT. NORMAL SINCE Jan 1	TOTAL IN. SINCE Jan 1	PCT. NORMAL SINCE Jan 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	TOLEDO	81	63	86	50	72	3	1.54	0.63	0.77	3.71	153	13.51	89	91	67	0	0	4	2
	YOUNGSTOWN	79	61	85	45	70	4	0.71	-0.20	0.33	2.07	88	20.62	125	91	72	0	0	4	0
OK	OKLAHOMA CITY	88	68	93	65	78	1	0.94	-0.10	0.76	3.29	106	12.72	74	91	53	3	0	2	1
	TULSA	87	69	93	64	78	-1	2.23	1.17	2.09	4.14	131	22.92	113	88	64	3	0	3	1
OR	ASTORIA	73	52	89	47	62	5	0.48	-0.11	0.47	1.79	106	33.33	96	87	62	0	0	2	0
	BURNS	77	40	82	33	58	0	0.00	-0.13	0.00	0.35	81	5.17	88	78	32	0	0	0	0
	EUGENE	79	47	91	43	63	3	0.06	-0.27	0.06	1.36	131	18.77	69	89	55	1	0	1	0
	MEDFORD	88	53	96	47	71	5	0.00	-0.13	0.00	0.18	41	9.81	105	69	25	3	0	0	0
	PENDLETON	78	49	84	43	63	-3	0.00	-0.16	0.00	1.59	312	9.50	140	74	37	0	0	0	0
	PORTLAND	81	55	91	50	68	5	0.00	-0.35	0.00	1.32	123	14.46	76	75	43	1	0	0	0
	SALEM	81	50	93	45	65	4	0.02	-0.30	0.02	1.81	191	19.25	92	82	45	1	0	1	0
PA	ALLENTOWN	82	63	87	51	73	4	0.67	-0.22	0.40	1.66	66	16.04	79	84	61	0	0	4	0
	ERIE	78	62	85	54	70	2	1.07	0.05	0.59	1.28	47	19.75	114	88	71	0	0	5	1
	MIDDLETOWN	82	66	87	58	74	3	1.13	0.26	0.66	3.89	159	18.41	97	95	64	0	0	3	1
	PHILADELPHIA	84	67	90	56	76	3	2.57	1.85	1.68	4.32	219	21.71	112	86	58	1	0	4	2
	PITTSBURGH	82	64	85	50	73	4	2.20	1.25	0.93	3.82	149	25.22	143	98	65	0	0	4	2
	WILKES-BARRE	79	62	85	53	70	2	0.53	-0.40	0.28	3.29	135	16.60	100	90	59	0	0	4	0
	WILLIAMSPORT	82	62	87	50	72	4	1.30	0.25	0.62	2.13	78	18.37	98	90	65	0	0	4	1
RI	PROVIDENCE	80	60	88	48	70	2	0.44	-0.34	0.31	1.22	57	17.36	78	88	62	0	0	2	0
SC	BEAUFORT	89	74	95	71	81	2	1.50	0.10	1.31	1.80	50	12.60	62	97	68	2	0	3	1
	CHARLESTON	87	74	94	72	80	2	1.21	-0.21	1.07	2.14	59	15.62	74	96	72	2	0	4	1
	COLUMBIA	89	73	94	71	81	2	2.40	1.21	0.96	3.53	117	13.49	61	95	63	3	0	4	2
	GREENVILLE	86	70	92	67	78	3	1.63	0.77	1.01	2.30	94	12.90	53	98	69	3	0	5	1
SD	ABERDEEN	71	49	78	39	60	-7	0.76	-0.07	0.51	3.22	146	11.95	132	94	52	0	0	3	1
	HURON	74	50	82	38	62	-6	0.47	-0.30	0.42	3.03	147	12.08	120	95	52	0	0	5	0
	RAPID CITY	68	46	82	40	57	-8	0.31	-0.34	0.21	0.91	49	6.11	72	88	44	0	0	2	0
	SIOUX FALLS	74	53	83	41	63	-5	4.12	3.31	3.58	5.88	284	18.93	171	85	58	0	0	4	1
TN	BRISTOL	84	66	86	63	75	4	2.15	1.28	1.42	3.33	139	22.67	109	99	64	0	0	5	1
	CHATTANOOGA	87	72	90	69	80	4	0.91	0.02	0.89	1.14	48	19.83	73	91	67	1	0	3	1
	KNOXVILLE	86	71	89	68	79	5	1.84	0.95	1.35	3.09	126	22.17	89	95	57	0	0	3	1
	MEMPHIS	88	74	93	72	81	2	0.68	-0.30	0.63	1.19	45	25.54	92	87	60	3	0	2	1
	NASHVILLE	86	71	89	68	78	3	0.34	-0.56	0.14	2.90	111	30.73	127	91	62	0	0	5	0
TX	ABILENE	91	68	93	63	79	-1	0.00	-0.71	0.00	2.11	102	14.74	146	88	60	6	0	0	0
	AMARILLO	91	63	101	59	77	2	0.07	-0.70	0.06	1.49	70	7.65	93	89	33	5	0	2	0
	AUSTIN	91	70	93	65	81	0	0.00	-0.85	0.00	8.04	301	25.43	157	91	61	6	0	0	0
	BEAUMONT	91	73	93	70	82	1	2.26	0.72	1.11	3.75	89	29.81	112	99	62	6	0	3	2
	BROWNSVILLE	93	77	94	74	85	2	0.00	-0.70	0.00	1.43	76	15.96	163	92	58	7	0	0	0
	CORPUS CHRISTI	92	74	94	72	83	1	0.00	-0.82	0.00	0.33	14	20.12	154	96	58	7	0	0	0
	DEL RIO	96	74	99	70	85	2	0.00	-0.55	0.00	0.31	21	11.10	139	88	61	7	0	0	0
	EL PASO	99	69	102	57	84	1	0.03	-0.17	0.03	0.03	7	2.81	130	28	12	7	0	1	0
	FORT WORTH	91	73	93	70	82	1	0.72	0.03	0.47	6.41	284	22.69	126	89	51	6	0	2	0
	GALVESTON	87	76	90	71	82	0	2.28	1.34	1.65	2.67	105	20.22	111	91	67	1	0	3	2
	HOUSTON	89	72	94	67	80	-2	6.69	5.44	3.58	10.23	287	36.88	165	93	69	4	0	6	2
	LUBBOCK	94	65	101	62	79	1	1.07	0.37	0.64	2.85	149	12.48	167	86	47	6	0	3	1
	MIDLAND	98	70	103	67	84	4	0.00	-0.39	0.00	0.00	0	4.80	94	77	40	7	0	0	0
	SAN ANGELO	97	70	98	63	83	4	0.00	-0.57	0.00	0.95	54	8.49	90	80	44	7	0	0	0
	SAN ANTONIO	92	71	93	67	82	0	0.08	-0.91	0.08	5.03	170	18.23	117	92	53	7	0	1	0
	VICTORIA	90	73	92	69	81	-1	1.03	-0.12	0.89	6.89	209	33.38	184	99	69	5	0	4	1
	WACO	89	72	93	68	81	-1	0.08	-0.59	0.07	4.27	208	28.16	173	93	61	4	0	2	0
	WICHITA FALLS	89	70	93	66	79	-1	0.07	-0.78	0.05	0.71	28	10.50	75	93	64	4	0	3	0
UT	SALT LAKE CITY	80	56	87	54	68	-2	0.30	0.17	0.15	2.95	567	9.81	106	60	25	0	0	2	0
VT	BURLINGTON	80	57	83	45	68	2	0.58	-0.20	0.39	2.36	113	12.37	85	89	41	0	0	3	0
VA	LYNCHBURG	83	67	90	61	75	3	0.91	0.06	0.42	3.31	144	13.53	67	93	69	1	0	6	0
	NORFOLK	86	71	93	56	79	4	0.14	-0.71	0.14	3.38	149	16.38	79	96	64	1	0	1	0
	RICHMOND	87	71	93	60	79	5	1.84	1.06	1.26	4.31	200	16.29	82	91	65	2	0	2	2
	ROANOKE	83	68	90	61	76	4	0.24	-0.59	0.10	2.97	130	17.08	84	91	69	1	0	5	0
	WASH/DULLES	85	67	91	60	76	5	0.53	-0.40	0.30	2.93	112	16.43	85	85	59	1	0	2	0
WA	OLYMPIA	78	45	89	39	62	4	0.29	-0.12	0.29	1.08	94	19.43	75	90	46	0	0	1	0
	QUILLAYUTE	72	46	87	39	59	4	0.46	-0.32	0.29	3.75	160	38.81	74	94	60	0	0	2	0
	SEATTLE-TACOMA	76	55	86	49	66	5	0.13	-0.21	0.10	1.06	112	15.20	83	71	48	0	0	2	0
	SPOKANE	72	48	77	39	60	-2	0.00	-0.26	0.00	1.51	196	9.24	109	70	31	0	0	0	0
	YAKIMA	79	46	86	40	63	0	0.00	-0.14	0.00	0.55	149	4.68	115	72	30	0	0	0	0
WV	BECKLEY	77	64	82	58	71	4	2.70	1.83	1.92	4.98	210	25.57	128	97	79	0	0	7	1
	CHARLESTON	83	68	87	60	75	5	2.30	1.38	1.31	5.16	206	28.82	141	97	72	0	0	4	1
	ELKINS	82	61	86	50	72	6	2.63	1.58	1.00	4.86	169	27.79	128	98	65	0	0	6	3
	HUNTINGTON	84	68	88	60	76	4	1.36	0.50	0.53	2.31	95	22.39	110	94	64	0	0	5	1
WI	EAU CLAIRE	77	53	82	40	65	-2	0.11	-0.89	0.09	2.70	100	16.16	124	93	42	0	0	2	0
	GREEN BAY	76	55	83	47	65	-1	1.94	1.14	1.27	4.54	215	20.95	179	96	65	0	0	4	2
	LA CROSSE	77	58	84	46	68	-2	1.83	0.89	1.89	2.34	96	19.20	144	95	46	0	0	3	1
	MADISON	78	59	85	50	69	2	0.67	-0.29	0.51	2.62	104	20.90	150	83	62	0	0	4	1
	MILWAUKEE	74	57	81	53	66	-1	1.04	0.19	0.79	2.76	127	19.35	128	88	69	0	0	3	1
WY	CASPER	69	41	84	37	55	-8	0.41	0.12	0.15	0.46	51	3.50	51	89	62	0	0	4	0
	CHEYENNE	68	44	86	39	56	-6	1.25	0.78	0.54	1.35	102	4.34	60	86	61	0	0	6	1
	LANDER	69	46	82	42	58	-6	1.04	0.81	0.45	1.05	138	6.85	91	66	49	0	0	4	0
	SHERIDAN	66	45	78	41	55	-7	0.22	-0.24	0.19	0.82	62	3.69	47	81	50	0	0	3	0

Based on 1971-2000 normals *** Not Available

NOTE: These data are preliminary and subject to change. In the past, precipitation totals from a number of stations have been incomplete.

Spring Weather Review

Review provided by USDA/WAOB

Highlights: Although it was the third-warmest spring during the 110-year period of record, according to preliminary information provided by the National Climatic Data Center, freezes on April 13 and May 14 threatened the central High Plains' already drought-stressed winter wheat crop. Nevertheless, spring temperatures averaged as much as 5°F above normal across the central Plains and the West, prematurely melting high-elevation snow in the latter region. Slightly below-normal spring temperatures were confined to parts of Florida and a small area, centered on northern Minnesota, along the Nation's northern tier.

Torrential May rainfall in the Midwest followed a period of drier-than-normal weather that promoted a rapid corn and soybean planting pace. In contrast, drought worsened through the end of May across the northern and central High Plains and the Southeast. On the southern Plains, wet weather during the first half of spring yielded to frequently hot, mostly dry conditions thereafter. In contrast, rainfall was periodically excessive in the western and central Gulf Coast regions. From the Rockies westward, pockets of above-normal spring precipitation in the Northwest and Southwest boosted topsoil moisture but provided little relief from a multi-year drought.

March: The month opened on a cool, stormy note in the West, but starting March 7, most areas from the Rockies westward endured dry weather and record-high temperatures. The warmth promoted spring fieldwork and winter grain development but caused premature melting of high-elevation Western snowpacks. Very warm weather also prevailed on the Plains, accompanied by mostly dry weather from eastern Colorado and northwestern Kansas northward into Montana. In contrast, showery weather aided pastures and winter grains across the southern and eastern Plains. Late in the month, however, heavy rain and melting snow caused lowland flooding in eastern North Dakota and northwestern Minnesota. Meanwhile, generally wet weather in the Corn Belt slowed fieldwork but boosted soil moisture reserves in preparation for spring planting. Rain and snow eased long-term precipitation deficits across the upper Midwest and maintained adequate to locally excessive soil moisture for winter wheat across the southern and eastern Corn Belt. Farther south, an intensifying, 6-month dry spell covered areas from near the mouth of the Mississippi River to the southern Atlantic States. By month's end, dry conditions increased stress on Southeastern pastures, winter grains, and emerging summer crops. In contrast, heavy rainfall eased irrigation demands in the lower Rio Grande Valley.

Monthly temperatures generally averaged 4 to 8°F above normal in the upper Midwest and across the western half of the Nation. Readings were as much as 10°F above normal in parts of California and the Desert Southwest. Temperatures averaged 2 to 4°F above normal in most locations from the Mississippi River to the Appalachians, but were as much as 2°F below normal along the Atlantic Seaboard. Brief Eastern warm spells during the first week of March and again toward month's end prevented more significant negative temperature departures along the Atlantic Coast.

April: Warm, mostly dry weather persisted across much of California and the Northwest, accelerating the loss of high-elevation snow, lengthening the growing season, and increasing the threat of an active wildfire season. Farther south and east, however, early-April storminess boosted topsoil moisture reserves and provided some drought relief in the Four Corners States and adjacent areas. The wet weather extended across the southern Plains and the Rio Grande Valley, causing some fieldwork delays but benefiting winter grains and newly planted summer crops. Rain and snow on the central High Plains aided drought-stressed winter wheat, although lingering concerns included subsoil moisture shortages and the effects of an April 13 freeze. Extremely dry conditions persisted on the northern High Plains, increasing stress on pastures, winter grains, and emerging spring wheat. Below-normal precipitation was also observed across much of the Midwest, promoting a record corn planting pace. Despite the April dryness, long-term Midwestern soil moisture shortages were confined to the northwestern Corn Belt, including Minnesota and South Dakota. Farther south, a narrow band of wet weather extended from the Ozark Plateau into southern New England. From April 20-24, torrential rainfall caused lowland flooding in and near the Ozarks. Across the remainder of the South, wet weather in the central and western Gulf Coast regions contrasted with another month of generally below-normal precipitation in the Southeastern States. Although late-month showers eased stress on Southeastern pastures, winter wheat, and emerging summer crops, many areas needed additional rainfall.

Despite large day-to-day fluctuations, monthly temperatures strayed only a few degrees from normal. The warmest conditions, relative to normal, were observed in the Midwest and across portions of northern California and the Northwest, where monthly temperatures averaged up to 5°F above normal at a few locations. In contrast, readings averaged as much as 2°F below normal in the southern Rockies and Rio Grande Valley, and ranged from 2 to 4°F below normal in much of Florida and southern portions of Georgia and Alabama.

May: A wavy front draped across the Northern United States separated chilly conditions along the Nation's northern tier from above-normal temperatures in most other areas. Warmth was most pronounced in the Mid-Atlantic States, where monthly temperatures approached or reached May-record levels and averaged up to 8°F above normal. Farther west, temperatures generally averaged 2 to 5°F above normal on the central and southern Plains, despite a few brief outbreaks of cool weather. Farther north, below-normal temperatures were the rule from Montana to the upper Great Lakes region. Monthly readings averaged as much as 8°F below normal in eastern North Dakota and northern Minnesota.

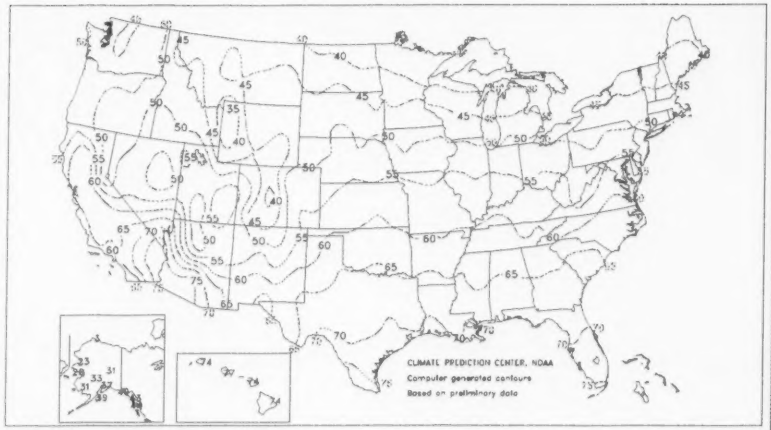
The boundary between warm and cool air helped to provide a focus for mid- to late-May rainfall in the Corn Belt. Midwestern downpours slowed or halted soybean and final corn planting, caused widespread lowland flooding, and left standing water in many fields. While warm, wet, humid conditions increased winter wheat disease potential across the southern Corn Belt, chilly weather hampered summer crop emergence and development in the upper Midwest. Farther south, favorably drier weather overspread the western and central Gulf Coast regions during the second half of May, allowing water to drain from previously flooded lowlands. In contrast, hotter- and drier-than-normal weather increased stress on Southeastern pastures and summer crops, especially across Georgia, South Carolina, and parts of Florida. Meanwhile, mostly dry, frequently hot weather depleted topsoil moisture on the central and southern High Plains, hastening winter wheat maturation but increasing stress on pastures and dryland summer crops. On the northern Plains, however, cool, showery weather slowed crop development but provided much-needed moisture for drought-stressed pastures and small grains. Showery conditions also aided winter wheat and spring-sown crops across the interior Northwest, while seasonably dry weather increased demands on drought-reduced irrigation reserves in the Southwest.

Total Precipitation (Inches)

MAR - MAY 2004

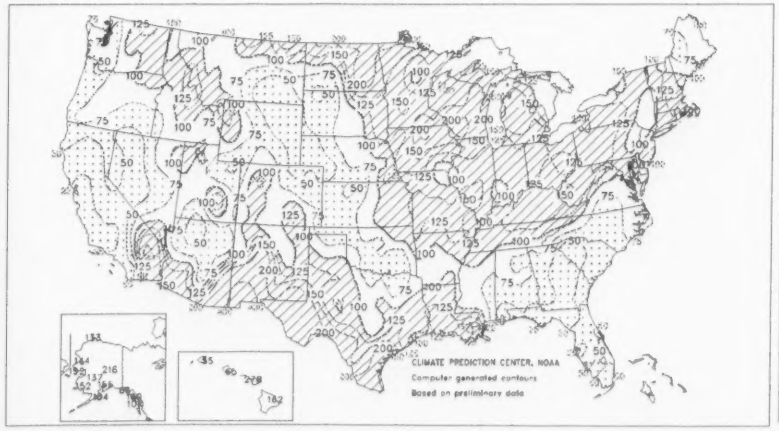
Average Temperature (°F)

MAR - MAY 2004



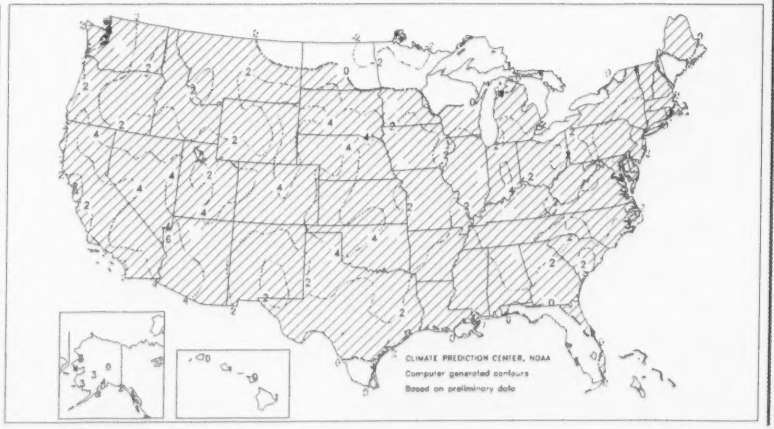
Percent Of Normal Precipitation

MAR - MAY 2004



Departure of Average Temperature from Normal (°F)

MAR - MAY 2004



TEMPERATURE AND PRECIPITATION SUMMARY
Spring 2004

STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	65	3	11.35	-4.25	LEXINGTON	57	2	18.96	6.10	COLUMBUS	54	2	13.18	3.16
HUNTSVILLE	63	3	12.04	-4.42	LONDON-CORBIN	58	2	19.09	5.78	DAYTON	53	2	14.49	3.00
MOBILE	68	1	6.14	-12.2	LOUISVILLE	60	4	18.98	5.78	MANSFIELD	50	3	14.10	2.15
MONTGOMERY	67	2	8.91	-6.00	PADUCAH	60	3	13.27	-0.70	TOLEDO	51	3	8.00	-1.00
AK ANCHORAGE	37	1	2.87	1.01	LA BATON ROUGE	68	1	19.76	3.79	YOUNGSTOWN	50	3	13.94	4.11
BARROW	3	1	0.43	0.10	LAKE CHARLES	69	1	19.20	5.96	OK OKLAHOMA CITY	63	3	6.52	-4.82
COLD BAY	38	2	11.11	3.68	NEW ORLEANS	69	0	25.95	11.07	TULSA	62	1	15.22	1.59
FAIRBANKS	31	1	2.34	1.25	SHREVEPORT	67	1	15.00	1.15	OR ASTORIA	51	2	11.67	-3.91
JUNEAU	43	2	10.85	0.90	ME BANGOR	43	0	9.69	-0.47	BURNS	46	2	2.10	-1.04
KING SALMON	35	2	3.38	0.30	CARIBOU	38	0	7.28	-1.20	EUGENE	53	3	6.23	-5.89
KODIAK	39	1	17.66	0.65	PORTLAND	44	0	12.94	0.72	MEDFORD	56	4	3.29	-1.08
NOME	27	5	3.82	1.83	MD BALTIMORE	56	3	13.09	2.27	PENDLETON	54	3	3.83	0.22
AZ FLAGSTAFF	46	3	2.56	-2.15	MA BOSTON	49	0	16.03	5.34	PORTLAND	56	4	4.33	-4.40
PHOENIX	76	5	2.19	0.71	WORCESTER	47	2	13.19	0.69	SALEM	53	2	5.64	-3.42
TUCSON	70	3	2.35	1.02	MI ALPENA	41	1	8.32	1.27	PA ALLENTOWN	53	4	9.60	-1.92
AR FORT SMITH	64	3	13.41	0.27	DETROIT	51	3	12.46	3.84	ERIE	49	2	13.65	3.80
LITTLE ROCK	64	2	13.97	-1.43	FLINT	49	4	11.26	3.17	MIDDLETOWN	55	3	10.64	-0.14
CA BAKERSFIELD	68	4	0.55	-1.55	GRAND RAPIDS	49	3	16.13	6.71	PHILADELPHIA	56	3	13.19	2.01
EUREKA	51	0	5.76	-4.32	HOUGHTON LAKE	43	1	13.02	6.11	PITTSBURGH	53	3	14.18	4.20
FRESNO	66	4	1.64	-1.71	LANSING	48	2	14.47	6.34	WILKES-BARRE	51	2	9.31	-0.35
LOS ANGELES	63	2	0.87	-2.40	MUSKEGON	48	3	16.19	7.97	WILLIAMSPORT	52	3	11.94	1.45
REDDING	64	5	3.99	-5.22	TRAVERSE CITY	43	0	11.72	4.72	PR SAN JUAN	78	-1	14.04	2.90
SACRAMENTO	63	3	0.73	-3.62	MN DULUTH	38	-1	7.07	0.34	RI PROVIDENCE	49	0	12.52	0.27
SAN DIEGO	65	3	0.81	-2.40	INT'L FALLS	35	-4	6.54	1.65	SC CHARLESTON	67	2	7.50	-2.94
SAN FRANCISCO	60	4	1.06	-3.75	MINNEAPOLIS	47	1	10.55	3.14	COLUMBIA	65	2	4.11	-6.83
STOCKTON	62	1	1.08	-2.66	ROCHESTER	47	3	11.10	2.67	FLORENCE	65	2	5.91	-4.19
CO ALAMOSA	45	4	1.25	-0.45	ST. CLOUD	43	0	9.36	2.76	GREENVILLE	63	4	5.54	-7.89
CO SPRINGS	50	4	3.67	-1.40	MS JACKSON	65	1	13.43	-3.15	MYRTLE BEACH	64	2	6.19	-2.71
DENVER	51	5	3.21	-1.45	MERIDIAN	65	1	9.31	-8.11	SD ABERDEEN	45	0	7.00	1.14
GRAND JUNCTION	56	4	2.49	-0.35	TUPELO	63	2	14.96	-2.08	HURON	48	2	7.49	0.53
PUEBLO	54	4	5.40	1.69	MO COLUMBIA	56	2	16.50	4.26	RAPID CITY	48	3	4.04	-1.81
CT BRIDGEPORT	50	1	13.92	1.75	JOPLIN	60	3	16.62	3.61	SIOUX FALLS	48	3	11.44	3.59
HARTFORD	50	1	11.52	-0.61	KANSAS CITY	57	3	11.15	-0.06	TN BRISTOL	58	3	13.03	1.57
DC WASHINGTON	59	3	8.93	-1.26	SPRINGFIELD	58	2	13.38	0.68	CHATTANOOGA	62	2	10.21	-4.49
DE WILMINGTON	55	3	12.76	1.25	ST JOSEPH	57	3	10.37	-0.17	JACKSON	61	1	17.63	1.75
FL DAYTONA BEACH	69	-1	2.78	-6.86	ST LOUIS	60	4	16.04	4.64	KNOXVILLE	61	3	12.70	-1.14
FT LAUDERDALE	76	2	4.55	-8.49	MT BILLINGS	49	3	2.42	-2.92	MEMPHIS	64	2	16.70	0.18
FT MYERS	73	-1	4.49	-3.34	BUTTE	41	2	3.39	-0.48	NASHVILLE	61	2	18.46	4.59
JACKSONVILLE	68	1	4.62	-5.93	GLASGOW	44	0	3.94	1.00	TX ABILENE	65	0	8.08	2.17
KEY WEST	76	-1	3.98	-3.42	GREAT FALLS	44	1	4.26	-0.68	AMARILLO	59	3	4.04	-0.92
MELBOURNE	71	0	3.06	-5.88	HELENA	48	4	4.39	1.07	AUSTIN	69	1	9.52	-0.17
MIAMI	75	-1	7.96	-3.48	KALISPELL	45	2	3.34	-1.03	BEAUMONT	70	1	13.08	-0.34
ORLANDO	71	-1	5.03	-4.67	MILES CITY	48	2	1.39	-2.78	BROWNSVILLE	75	1	11.83	6.46
PENSACOLA	68	0	4.22	-10.4	MISSOULA	47	2	5.59	1.59	COLLEGE STATION	70	2	14.85	3.76
ST PETERSBURG	72	-1	5.41	-2.60	NE GRAND ISLAND	54	4	5.02	-3.70	CORPUS CHRISTI	73	1	15.65	8.39
TALLAHASSEE	67	0	4.54	-10.4	HASTINGS	53	3	7.11	-2.43	DALLAS/FT WORTH	67	2	9.39	-2.02
TAMPA	72	0	4.62	-2.87	LINCOLN	54	3	6.79	-2.55	DEL RIO	71	0	9.21	4.23
WEST PALM BEACH	75	1	7.19	-5.45	MCCOOK	54	4	3.87	-3.02	EL PASO	67	2	2.36	1.49
GA ATHENS	64	3	3.27	-8.93	NORFOLK	52	3	11.63	3.15	GALVESTON	71	1	8.59	-0.43
ATLANTA	64	2	6.43	-6.52	NORTH PLATTE	51	3	2.97	-3.58	HOUSTON	71	2	15.11	3.00
AUGUSTA	65	2	5.02	-5.60	OMAHA/EPPLEY	54	3	13.67	4.16	LUBBOCK	63	3	5.84	1.48
COLUMBUS	67	2	6.71	-6.50	SCOTTSBLUFF	50	3	1.63	-4.02	MIDLAND	65	1	3.33	0.39
MACON	67	4	4.53	-6.48	VALENTINE	50	4	5.71	-0.57	SAN ANGELO	67	2	4.45	-1.23
SAVANNAH	66	0	6.30	-4.27	NV ELKO	48	3	2.71	-0.16	SAN ANTONIO	70	1	9.16	-0.05
HI HILO	74	1	56.67	21.71	ELY	46	3	1.70	-1.54	VICTORIA	71	1	20.25	9.92
HONOLULU	77	1	2.44	-1.34	LAS VEGAS	71	4	1.13	0.15	WACO	68	2	14.62	4.69
KAHULUI	74	0	13.26	8.50	RENO	55	6	1.58	-0.25	WICHITA FALLS	65	2	5.30	-3.51
LIHUE	74	0	5.21	-4.24	WINNEMUCCA	50	2	1.05	-1.72	UT SALT LAKE CITY	54	3	4.23	-1.79
ID BOISE	54	3	3.24	-0.71	NH CONCORD	46	1	13.07	3.63	VT BURLINGTON	45	1	8.69	0.17
LEWISTON	54	3	4.92	0.94	NJ ATLANTIC CITY	54	3	11.48	0.59	VA LYNCHBURG	57	2	6.44	-4.96
POCATELLO	48	2	2.57	-1.50	NEWARK	55	3	12.32	-0.27	NORFOLK	62	4	9.59	-1.61
IL CHICAGO/O'HARE	51	3	10.65	0.94	NM ALBUQUERQUE	59	3	3.66	1.95	RICHMOND	61	4	8.56	-2.66
MOLINE	53	3	15.27	4.28	NY ALBANY	49	2	9.04	-1.02	ROANOKE	60	4	9.44	-2.25
PEORIA	55	4	10.76	0.20	BINGHAMTON	47	3	10.49	0.48	WASH/DULLES	57	4	10.16	-0.83
ROCKFORD	51	3	14.06	4.03	BUFFALO	47	1	12.77	3.39	WA OLYMPIA	51	3	6.27	-4.87
SPRINGFIELD	56	3	10.12	-0.45	ROCHESTER	47	2	10.04	1.89	QUILLAYUTE	49	2	15.86	-8.07
IN EVANSVILLE	59	3	13.41	-0.37	SYRACUSE	48	3	13.64	3.84	SEATTLE-TACOMA	53	2	5.34	-2.77
FORT WAYNE	52	3	10.64	0.49	NC ASHEVILLE	57	3	8.23	-4.27	SPOKANE	49	2	4.85	0.44
INDIANAPOLIS	56	4	14.42	3.02	CHARLOTTE	62	1	5.73	-5.27	YAKIMA	52	3	1.15	-0.59
SOUTH BEND	51	2	9.87	-0.14	GREENSBORO	60	2	6.18	-5.05	WV BECKLEY	54	3	15.70	4.26
IA BURLINGTON	54	2	9.86	-1.11	HATTERAS	60	0	7.36	-4.80	CHARLESTON	57	3	17.54	6.09
CEDAR RAPIDS	51	2	12.22	2.92	RALEIGH	62	3	8.57	-2.05	ELKINS	52	3	17.38	5.16
DES MOINES	53	3	16.76	6.72	WILMINGTON	64	1	7.05	-4.51	HUNTINGTON	58	3	14.05	2.48
DUBUQUE	49	2	13.34	3.16	ND BISMARCK	45	2	3.43	-1.10	WI EAU CLAIRE	45	0	10.52	2.06
SIOUX CITY	51	2	10.04	1.54	DICKINSON	42	-1	3.03	-1.70	GREEN BAY	45	1	13.55	6.18
WATERLOO	50	2	17.00	7.49	FARGO	42	-1	7.96	2.81	LA CROSSE	49	1	14.61	5.85
KS CONCORDIA	56	3	7.98	-1.02	GRAND FORKS	38	-4	7.73	3.40	MADISON	47	1	16.22	7.34
DODGE CITY	57	3	4.73	-2.36	JAMESTOWN	41	-2	9.20	4.74	MILWAUKEE	47	2	14.06	4.63
GOODLAND	53	4	3.90	-2.27	MINOT	41	-1	3.51	-1.40	WAUSAU	43	-1	9.35	1.05
HILL CITY	56	5	2.25	-4.92	WILLISTON	42	0	3.93	0.26	WY CASPER	45	2	2.37	-2.43
TOPEKA	57	3	10.27	-0.29	OH AKRON-CANTON	50	2	13.30	2.80	CHEYENNE	47	5	2.47	-2.61
WICHITA	59	4	10.78	1.34	CINCINNATI	55	1	14.31	1.86	LANDER	45	1	4.17	-1.52
KY JACKSON	58	2	18.67	5.34	CLEVELAND	50	2	14.23	4.42	SHERIDAN	47	3	1.83	-3.35

Based on 1971-2000 normals.

*** Not Available.

National Agricultural Summary

June 14 - 20, 2004

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Wet conditions prevailed across central and eastern areas of the Nation. Moderate to locally heavy precipitation covered the central and southern Great Plains, Mississippi Delta, Atlantic Coastal Plains, and most of the Corn Belt, causing significant fieldwork delays in many areas. Meanwhile, the Southwest, Pacific Northwest, and California remained seasonably dry, with little to no precipitation. Temperatures were above normal in most areas, but a cold air mass across the north-central part of the Nation pushed temperatures below normal from the interior Pacific Northwest to the western Corn Belt, stretching as far south as the central Great Plains. Warm, moist conditions across most of the Corn Belt accelerated crop development but caused continued winter wheat quality concerns. In the southern Atlantic Coast States, moderate to heavy rainfall helped to relieve moisture stress on crops and pastures.

Corn: Four percent of the crop had reached the silking stage, 2 percentage points ahead of last year and 1 point ahead of the 5-year average. The crop was most advanced in Texas, where 60 percent of the acreage had reached this stage. Meanwhile, in North Carolina, silking was 52 percent complete, 30 points ahead of normal. Silking had not begun across the northern Corn Belt and northern Great Plains but was ahead of the normal pace elsewhere. Widespread rainfall in the central Great Plains improved crop conditions. However, conditions declined in the northern Corn Belt as additional precipitation kept fields excessively wet.

Soybeans: Growers had planted 95 percent of their acreage, compared with 93 percent last year and 94 percent for the 5-year average. Emergence, at 90 percent, was 4 points ahead of last year and 1 point ahead of normal. Planting was completed in Iowa, Minnesota, Mississippi, Nebraska, and North Dakota and neared completion in Illinois, Indiana, Louisiana, and South Dakota. Emergence steadily progressed in the northern Corn Belt and adjacent areas of the Great Plains, despite below-normal temperatures.

Winter Wheat: Producers had harvested 37 percent of their acreage, 17 points ahead of last year and 11 points ahead of normal. Harvest was most advanced in Oklahoma and Arkansas, where 92 and 86 percent of the acreage had been harvested, respectively. Illinois growers progressed the most, harvesting 31 percent of their crop, while California producers harvested 30 percent of their acreage. Harvest also progressed rapidly in Arkansas, Kansas, Missouri, and North Carolina, where one-fourth or more of the crop was harvested despite moderate to heavy rainfall. Harvest had not begun in the Pacific Northwest, Rocky Mountains, northern Great Plains, and northern Corn Belt.

Cotton: Squaring advanced to 41 percent complete, compared with 31 percent last year and 39 percent for the 5-year average. Seven percent of the acreage was setting bolls, 1 point ahead of last year but the same as the 5-year average. Over one-third of Tennessee's acreage entered the squaring stage during the week, as did one-fourth or more of Arkansas's, California's, and Virginia's crop. Squaring was ahead of normal in all States, except Arizona, Louisiana, Mississippi, Missouri, and Texas, with Virginia's crop exceeding the normal pace by 49 points. Ten percent or more of the crop was setting bolls in Arizona, California, and Texas, with California the most advanced, at 20 percent complete, compared with the normal pace of 2 percent. Elsewhere, boll setting was just beginning.

Sorghum: Eighty-nine percent of the crop had been planted, 7 points ahead of last year and 1 point ahead of normal. Heading advanced to 15 percent complete, the same as last year and the 5-year average. Planting progressed the most in Oklahoma, where producers planted one-fifth of the crop during the week. Planting was ahead of the normal pace in all States, except Arkansas, Kansas, and New Mexico. Heading progress was mostly limited to the Mississippi Delta and southern Great Plains. Development was most advanced in Texas, where 42 percent of the crop had reached the heading stage.

Rice: Four percent of the crop was at or beyond the heading stage, the same as last year but 1 point behind normal. Heading had begun in California, Louisiana, Mississippi, and Texas. However, only California was ahead of its normal heading pace. Crop condition improved in most States but declined slightly in Missouri.

Small Grains: Spring wheat heading, at 13 percent complete, was 4 points behind last year and 2 points behind normal. The crop was most advanced in Washington, where 60 percent of the crop had reached this stage. Heading was most active in South Dakota, where 35 percent of the acreage headed during the week. Progress was behind the normal pace in all other States.

Twelve percent of the barley crop had reached the heading stage, compared with 17 percent last year and 15 percent for the 5-year average. Heading progressed slowly in most States but showed a 16-point gain in Idaho. All States were behind the normal heading pace despite rapid progress through both planting and emergence earlier in the season, as cool weather limited growth and development.

Oat heading advanced to 38 percent complete, 3 points ahead of last year and 4 points ahead of normal. Heading progressed rapidly in Iowa, South Dakota, and Wisconsin, where one-fourth or more of the crop headed. The crop was most advanced in Nebraska and Iowa, where 84 and 81 percent of the crop was at or beyond this stage.

Other Crops: Producers had planted 89 percent of the sunflower crop, 4 points behind last year and the 5-year average. South Dakota growers progressed the most, planting 18 percent of their acreage. Planting was most advanced in North Dakota, where 95 percent of the crop had been planted. Progress was behind the normal pace in all States, except Colorado.

Peanuts pegging reached 14 percent complete, compared with 11 percent last year and 15 percent for the average. Progress advanced by 20 points in Florida and Virginia but was slow elsewhere. The crop was behind the normal pace in Alabama, Georgia, and Texas but ahead of normal elsewhere.

Crop Progress and Condition

Week Ending June 20, 2004

Weekly U.S. Crop Progress and Condition Tables provided by USDA/NASS

Winter Wheat Percent Harvested

	Jun 20 2004	Prev Week	Prev Year	5-Yr Avg
AR	86	61	51	71
CA	60	30	51	44
CO	0	0	0	1
ID	0	0	0	0
IL	39	8	13	21
IN	17	6	8	13
KS	40	15	10	22
MI	0	0	0	0
MO	38	13	21	32
MT	0	0	0	0
NE	1	0	0	2
NC	58	31	35	57
OH	0	0	0	0
OK	92	80	63	68
OR	0	0	0	0
SD	0	0	0	0
TX	76	55	60	57
WA	0	0	0	0
18 Sts	37	23	20	26

These 18 States harvested 92% of last year's winter wheat acreage.

Soybeans Percent Planted

	Jun 20 2004	Prev Week	Prev Year	5-Yr Avg
AR	93	86	83	85
IL	97	96	93	96
IN	96	95	89	95
IA	100	99	100	98
KS	90	87	92	90
KY	72	65	57	76
LA	97	95	80	93
MI	87	81	97	94
MN	100	99	99	98
MS	100	99	98	99
MO	90	85	88	86
NE	100	98	99	99
NC	75	65	63	73
ND	100	96	100	99
OH	91	90	86	94
SD	98	94	99	99
TN	85	81	66	80
WI	84	76	97	96
18 Sts	95	93	93	94

These 18 States planted 96% of last year's soybean acreage.

Peanuts Percent Pegging

	Jun 20 2004	Prev Week	Prev Year	5-Yr Avg
AL	6	0	4	9
FL	45	25	34	39
GA	16	8	12	19
NC	5	5	0	4
OK	21	10	40	16
TX	1	0	4	7
VA	20	0	0	1
7 Sts	14	6	11	15

These 7 States planted 97% of last year's peanut acreage.

Spring Wheat Percent Headed

	Jun 20 2004	Prev Week	Prev Year	5-Yr Avg
ID	18	5	30	26
MN	11	1	28	18
MT	1	0	3	7
ND	7	1	12	8
SD	51	16	39	38
WA	60	50	52	59
6 Sts	13	4	17	15

These 6 States planted 98% of last year's spring wheat acreage.

Corn Percent Silking

	Jun 20 2004	Prev Week	Prev Year	5-Yr Avg
CO	0	NA	0	0
IL	4	NA	1	1
IN	2	NA	0	0
IA	0	NA	0	0
KS	8	NA	1	3
KY	10	NA	0	9
MI	0	NA	0	0
MN	0	NA	0	0
MO	14	NA	2	5
NE	0	NA	0	0
NC	52	NA	11	22
ND	0	NA	0	0
OH	0	NA	0	0
PA	0	NA	0	0
SD	0	NA	0	0
TN	35	NA	22	22
TX	60	NA	63	59
WI	0	NA	0	0
18 Sts	4	NA	2	3

These 18 States planted 92% of last year's corn acreage.

Soybeans Percent Emerged

	Jun 20 2004	Prev Week	Prev Year	5-Yr Avg
AR	84	75	74	74
IL	94	89	84	92
IN	93	90	81	91
IA	99	94	96	94
KS	82	78	82	82
KY	67	55	43	69
LA	92	89	72	89
MI	77	62	88	87
MN	96	91	98	95
MS	99	98	94	96
MO	83	73	76	78
NE	97	90	94	96
NC	64	50	52	62
ND	93	82	96	95
OH	85	72	81	87
SD	92	77	92	91
TN	74	66	50	66
WI	73	54	87	88
18 Sts	90	83	86	89

These 18 States planted 96% of last year's soybean acreage.

Sunflowers Percent Planted

	Jun 20 2004	Prev Week	Prev Year	5-Yr Avg
CO	77	68	76	73
KS	73	64	79	84
ND	95	86	98	99
SD	82	64	89	89
4 Sts	89	77	93	93

These 4 States planted 87% of last year's sunflower acreage.

Crop Progress and Condition

Week Ending June 20, 2004

Weekly U.S. Crop Progress and Condition Tables provided by USDA/NASS

Cotton Percent Squaring

	Jun 20 2004	Prev Week	Prev Year	5-Yr Avg
AL	40	26	33	39
AZ	51	38	46	63
AR	68	40	42	56
CA	65	40	15	37
GA	51	31	49	46
LA	60	48	54	68
MS	54	30	42	60
MO	44	24	23	48
NC	40	30	26	32
OK	20	8	18	10
SC	35	19	12	25
TN	59	25	18	42
TX	26	18	25	28
VA	60	32	4	11
14 Sts	41	26	31	39

These 14 States planted 98% of last year's cotton acreage.

Sorghum Percent Planted

	Jun 20 2004	Prev Week	Prev Year	5-Yr Avg
AR	97	97	100	100
CO	87	81	84	80
IL	94	93	42	82
KS	87	84	86	90
LA	100	100	99	100
MO	94	91	90	92
NE	99	95	96	98
NM	59	55	67	74
OK	87	67	56	69
SD	92	77	93	90
TX	90	80	76	84
11 Sts	89	83	82	88

These 11 States planted 97% of last year's sorghum acreage.

Oats Percent Headed

	Jun 20 2004	Prev Week	Prev Year	5-Yr Avg
IA	81	54	68	71
MN	17	4	33	25
NE	84	71	85	76
ND	6	1	5	6
OH	57	49	57	65
PA	43	27	28	51
SD	47	16	39	34
WI	45	20	31	32
8 Sts	38	21	35	34

These 8 States planted 53% of last year's oat acreage.

Barley Percent Headed

	Jun 20 2004	Prev Week	Prev Year	5-Yr Avg
ID	28	12	36	30
MN	6	2	31	18
MT	6	0	5	10
ND	4	1	12	6
WA	50	49	42	52
5 Sts	12	6	17	15

These 5 States planted 83% of last year's barley acreage.

Cotton Percent Setting Bolls

	Jun 20 2004	Prev Week	Prev Year	5-Yr Avg
AL	0	NA	1	1
AZ	10	NA	8	15
AR	2	NA	0	1
CA	20	NA	0	2
GA	4	NA	6	9
LA	2	NA	5	6
MS	0	NA	0	4
MO	0	NA	0	0
NC	0	NA	0	0
OK	0	NA	0	0
SC	1	NA	0	3
TN	0	NA	0	0
TX	11	NA	12	12
VA	2	NA	0	0
14 Sts	7	NA	6	7

These 14 States planted 98% of last year's cotton acreage.

Sorghum Percent Headed

	Jun 20 2004	Prev Week	Prev Year	5-Yr Avg
AR	14	4	13	6
CO	0	0	0	0
IL	0	0	0	1
KS	0	0	0	0
LA	13	9	20	20
MO	1	1	1	0
NE	0	0	0	0
NM	0	0	0	0
OK	2	0	0	1
SD	0	0	0	0
TX	42	36	40	42
11 Sts	15	13	15	15

These 11 States planted 97% of last year's sorghum acreage.

Rice Percent Headed

	Jun 20 2004	Prev Week	Prev Year	5-Yr Avg
AR	0	NA	0	0
CA	10	NA	0	0
LA	9	NA	19	25
MS	1	NA	0	1
MO	0	NA	0	0
TX	11	NA	16	24
6 Sts	4	NA	4	5

These 6 States planted 100% of last year's rice acreage.

Crop Progress and Condition

Week Ending June 20, 2004

Weekly U.S. Crop Progress and Condition Tables provided by USDA/NASS

Winter Wheat Crop Condition by Percent

	VP	P	F	G	EX
AR	1	5	32	49	13
CA	0	5	20	30	45
CO	20	28	30	21	1
ID	0	3	11	72	14
IL	0	3	27	52	18
IN	2	6	28	48	16
KS	24	21	27	25	3
MI	1	5	30	55	9
MO	2	7	32	52	7
MT	4	12	29	44	11
NE	20	25	35	19	1
NC	0	2	29	60	9
OH	3	8	33	45	11
OK	4	13	30	45	8
OR	1	9	32	49	9
SD	20	23	33	19	5
TX	9	23	34	29	5
WA	2	5	23	61	9
18 Sts	12	17	29	35	7
Prev Wk	11	17	30	35	7
Prev Yr	8	13	26	38	15

Soybeans Crop Condition by Percent

	VP	P	F	G	EX
AR	2	5	27	49	17
IL	2	5	24	50	19
IN	3	7	24	50	16
IA	2	6	22	54	16
KS	0	4	23	66	7
KY	2	6	30	50	12
LA	2	9	37	48	4
MI	2	10	40	38	10
MN	2	9	38	45	6
MS	0	2	14	57	27
MO	5	11	19	53	12
NE	1	5	24	51	19
NC	0	2	25	59	14
ND	1	3	27	62	7
OH	5	9	30	44	12
SD	0	2	18	67	13
TN	0	2	13	66	19
WI	3	16	22	47	12
18 Sts	2	6	25	53	14
Prev Wk	1	5	26	55	13
Prev Yr	1	5	24	58	12

Cotton Crop Condition by Percent

	VP	P	F	G	EX
AL	1	1	16	75	7
AZ	5	11	19	32	33
AR	0	3	26	57	14
CA	0	0	5	25	70
GA	1	4	28	53	14
LA	1	6	34	51	8
MS	1	2	20	54	23
MO	0	1	27	63	9
NC	0	2	16	66	16
OK	2	3	39	56	0
SC	0	5	31	62	2
TN	0	2	14	64	20
TX	7	9	33	37	14
VA	0	0	17	58	25
14 Sts	3	5	26	49	17
Prev Wk	5	9	27	46	13
Prev Yr	9	12	31	39	9

Oats Crop Condition by Percent

	VP	P	F	G	EX
IA	0	2	20	62	16
MN	3	9	27	50	11
NE	12	12	28	37	11
ND	4	12	32	45	7
OH	8	10	27	46	9
PA	5	15	29	44	7
SD	4	17	24	45	10
WI	2	8	24	51	15
8 Sts	4	11	27	47	11
Prev Wk	4	10	26	50	10
Prev Yr	1	3	19	61	16

Corn Crop Condition by Percent

	VP	P	F	G	EX
CO	0	1	13	67	19
IL	1	3	15	57	24
IN	3	5	19	52	21
IA	2	6	19	55	18
KS	1	6	34	46	13
KY	2	8	25	42	23
MI	5	12	35	44	4
MN	2	7	37	46	8
MO	2	5	16	57	20
NE	2	5	22	48	23
NC	1	3	21	55	20
ND	2	4	26	61	7
OH	4	9	23	44	20
PA	1	2	14	39	44
SD	1	2	18	63	16
TN	0	3	16	50	31
TX	0	3	19	42	36
WI	4	17	30	38	11
18 Sts	2	6	22	51	19
Prev Wk	2	5	23	53	17
Prev Yr	1	5	21	56	17

Sorghum Crop Condition by Percent

	VP	P	F	G	EX
AR	0	6	42	46	6
CO	10	30	44	15	1
IL	0	4	32	53	11
KS	1	7	36	48	8
LA	0	4	47	47	2
MO	0	3	27	63	7
NE	1	5	39	48	7
NM	0	7	66	25	2
OK	1	18	45	33	3
SD	1	1	28	67	3
TX	3	9	22	44	22
11 Sts	2	8	32	46	12
Prev Wk	2	9	33	45	11
Prev Yr	2	7	31	55	5

Peanuts Crop Condition by Percent

	VP	P	F	G	EX
AL	0	5	25	65	5
FL	0	1	19	65	15
GA	0	1	29	56	14
NC	0	0	6	85	9
OK	0	3	30	62	5
TX	0	2	27	59	12
VA	0	0	15	65	20
7 Sts	0	2	25	61	12
Prev Wk	1	2	28	61	8
Prev Yr	0	3	24	55	18

VP - Very Poor
P - Poor
F - Fair
G - Good
EX - Excellent

NA - Not Available
*** - Revised**

Crop Progress and Condition

Week Ending June 20, 2004

Weekly U.S. Crop Progress and Condition Tables provided by USDA/NASS

Spring Wheat Crop Condition by Percent

	VP	P	F	G	EX
ID	0	0	10	79	11
MN	7	8	38	37	10
MT	1	6	29	60	4
ND	2	8	22	50	18
SD	3	12	23	45	17
WA	0	3	29	62	6
6 Sts	2	8	26	51	13
Prev Wk	2	7	27	52	12
Prev Yr	0	2	20	56	22

Barley Crop Condition by Percent

	VP	P	F	G	EX
ID	0	2	6	81	11
MN	8	13	45	28	6
MT	1	5	31	53	10
ND	2	7	21	51	19
WA	0	2	31	55	12
5 Sts	2	6	23	55	14
Prev Wk	1	4	27	54	14
Prev Yr	0	3	15	60	22

Rice Crop Condition by Percent

	VP	P	F	G	EX
AR	1	3	23	52	21
CA	0	5	45	25	25
LA	0	5	39	48	8
MS	0	1	13	63	23
MO	0	1	17	52	30
TX	0	0	19	66	15
6 Sts	0	3	28	49	20
Prev Wk	0	4	29	48	19
Prev Yr	1	6	29	48	16

Pasture and Range Crop Condition by Percent
Week Ending June 20, 2004

	VP	P	F	G	EX		VP	P	F	G	EX
AL	0	5	24	65	6	NH	0	0	18	49	33
AZ	25	19	20	22	13	NJ	0	0	15	85	0
AR	0	1	20	59	20	NM	21	39	37	3	0
CA	35	40	20	5	0	NY	0	2	9	48	41
CO	18	31	34	16	1	NC	2	7	25	60	6
CT	0	0	15	73	12	ND	15	18	27	32	8
DE	0	0	13	70	17	OH	1	6	26	52	15
FL	0	5	50	40	5	OK	7	14	31	36	12
GA	3	15	35	39	8	OR	0	8	30	51	11
ID	0	2	21	55	22	PA	1	2	17	64	16
IL	0	1	12	64	23	RI	0	0	0	40	60
IN	1	3	15	64	17	SC	5	18	46	30	1
IA	0	3	15	52	30	SD	10	19	30	33	8
KS	18	24	22	30	6	TN	0	3	19	61	17
KY	0	3	14	59	24	TX	6	10	22	43	19
LA	1	3	24	60	12	UT	6	9	36	45	4
ME	0	1	4	66	29	VT	0	3	13	72	12
MD	0	4	18	49	29	VA	0	3	14	58	25
MA	0	0	5	63	32	WA	12	13	27	47	1
MI	1	3	19	56	21	WV	0	0	10	65	25
MN	3	6	29	51	11	WI	1	4	14	58	23
MS	0	8	22	54	16	WY	32	29	26	13	0
MO	1	3	18	61	17	48 Sts	8	13	24	42	13
MT	15	26	33	22	4						
NE	17	22	24	29	8	Prev	8	14	26	40	12
NV	2	20	40	35	3	Prev	3	10	28	47	12

National crop conditions for selected States are weighted based upon the year 2003 planted acres.

State Agricultural Summaries

These summaries, issued weekly through the summer growing season, provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service. The crop weather reports are also available on the Internet through the NASS Home Page on the World Wide Web at http://www.usda.gov/nass/ or from JAWF at http://www.usda.gov/oce/waob/jawf.

ALABAMA: Days suitable for fieldwork 4.0. Topsoil 7% very short, 14% short, 67% adequate, 12% surplus. Corn 40% silked, 47% 2003, 45% avg.; 12% dough, 10% 2003, 10% avg.; 2% dented.; 1% avg.; condition 0% very poor, 1% poor, 21% fair, 71% good, 7% excellent. Soybeans 81% planted, 53% 2003, 72% avg.; 72% emerged, 46% 2003, 59% avg.; 9% blooming,; condition 0% very poor, 1% poor, 17% fair, 79% good, 3% excellent. Winter wheat condition 1% very poor, 5% poor, 32% fair, 59% good, 3% excellent. Pasture feed 0% very poor, 5% poor, 24% fair, 65% good, 6% excellent. Livestock condition 2% very poor, 3% poor, 21% fair, 56% good, 18% excellent. The state received rainfall which has improved pastures, hayfields. Farmers are spraying for insect, disease on fruit, vegetable crops, applying herbicide, plant growth regulators, some insecticides to cotton, are also harvesting hay and managing cattle.

ALASKA: Days suitable for fieldwork 6.0. Topsoil 45% short, 55% adequate. Subsoil 40% short, 60% adequate. Temperatures were well above normal last week, reaching into the high 80's in the Tanana Valley. Most growing areas across the state could use some rain. The barley and oat crops were reported as 100% pre-boot. Condition of the barley crop was listed as 50% good, 50% excellent. The oat crop was 5% fair, 60% good, 35% excellent. Potatoes were reported as 60% emerged statewide. Crop growth was listed as 15% slow, 55% moderate, 30% rapid. Hay harvest was in full swing with 35% of the first cutting reported as harvested. Condition of the hay crop was listed as 10% fair, 45% good, 45% excellent. Activities: Harvesting hay, weed control, harvesting vegetables, equipment preparation and irrigation activities.

ARIZONA: Temperatures for the State were average for the third week of June. Small grain harvesting remained active. Alfalfa condition remains good to excellent. Cotton has fifty-one percent of squaring completed while setting bolls are ten percent complete. No precipitation was reported at any of the 17 reporting stations.

ARKANSAS: Days suitable for fieldwork 5. Soil 0% very short, 15% short, 70% adequate, 15% surplus. Corn 77% silked, 41% 2003, 31% 5 -yr avg.; condition 0% very poor, 3% poor, 23% fair, 58 % good, 18% excellent; Soybeans: 93% planted, 83% 2003, 85% 5- yr avg.; 84% emerged, 74% 2003, 74% 5 -yr avg.; 14% bloomed, 0% 2003, 3% 5- yr avg.; condition 2% very poor, 5% poor, 27% fair, 49% good, 17% excellent. Sorghum 97% planted, 100% 2003, 100% 5-yr avg.; 96% emerged, 100% 2003, 98% 5- yr avg.; 14% headed, 13% 2003, 6% 5- yr avg.; condition 0% very poor, 6% poor, 42% fair, 46% good, 6% excellent. Cotton 100% emerged, 98% 2003, 100% 5 -yr avg.; 68% squared, 42% 2003, 56% 5- yr avg.; 2% bolls set, 0% 2003, 1% 5- yr avg.; condition 0% very poor, 3% poor, 26% fair, 57 % good, 14% excellent. Rice 100% emerged, 99% 2003, 100% 5- yr avg.; 0% headed, 0% 2003, 0% 5- yr avg. ; condition 1% very poor, 3% poor, 23% fair, 52% good, 21% excellent. Wheat 86% harvested, 51% 2003, 71% 5- yr avg.; condition 1% very poor, 5% poor, 32% fair, 49% good, 13% excellent. Hay-Other condition 0% very poor, 2% poor, 23% fair, 57% good, 18% excellent. Hay-Alfalfa condition 1% very poor, 5% poor, 41% fair, 50% good, 3% excellent. Pasture, Range feed 0% very poor, 1% poor, 20% fair, 59% good, 20% excellent. Rains the past week interrupted farm activities, causing some producers to work between showers. CROPS: Weather across the state has varied, being beneficial to some farmers, an inconvenience to others. Corn is experiencing excellent weather conditions causing it to be ahead of schedule, have an overall good condition. Fields are being prepared, soybean planting continues. Emerged soybeans, cotton are receiving herbicide treatments. Some cotton producers have begun irrigation. Early planted rice is recieving treatments of mid-season nitrogen. Wheat harvest is continuing as weather permits, remains well ahead of schedule. LIVESTOCK: Livestock are in good condition with reports of making good gains. Pastures and hay fields are being sprayed for weeds.

CALIFORNIA: A levee break on the Jones Tract in San Joaquin County resulted in the loss of thousands of acres of wheat, corn, alfalfa, other crops due to flooding. In other areas, harvesting of wheat, oats, barley was ongoing. Overall, favorable wheat yields have been observed. However, several growers reported lower than expected yields due to the relatively warm weather earlier in the season. Rapid growth was observed in many corn fields. Corn was planted for silage in a few areas. Rice planting was nearing completion. Fields were treated with herbicides to control broad leaf weeds. Cotton was progressing very well as fields benefitted from warm weather. Blooms were noted in a number of fields. Irrigation, insecticide treatments continued as needed. Alfalfa, small grains were harvested for hay, silage, greenchop. Good quality was reported for fourth, fifth alfalfa cuttings. Many fields of alfalfa planted for seed were in full bloom. Steady growth was reported for newly emerged plantings of sugar beets. Dry bean planting was ongoing, with some fields already emerged. Vineseed was planted in some areas. Many sunflower, safflower fields were blooming. Potato harvesting continued in the San Joaquin Valley. Sweet potato planting was almost complete. Table grape harvesting had an earlier than usual start in Kern, Fresno counties due to the warmer weather experienced this spring. Fruit development also advanced in wine, raisin grape vineyards. Growers continued to irrigate, disc for weed control, and apply some fungicides. Some increased concentrations of mealy bugs were noted in the Sanger district, prompting growers to apply treatments. Stone fruit harvesting continued at a rapid pace throughout the State. Among the varieties picked, packed were Sweet Scarlet, Prima 13 peaches, Emelia, Honey Kist nectarines, Patterson, Judy's Delight apricots, Black Amber, Santa Rosa plums. Field work underway in tree fruit orchards included cultivation, irrigation, fruit thinning, some minor pruning. Blueberry harvesting ended in the Selma district, but continued in many other locations. Harvesting of blackberries, boysenberries also continued. Strawberry harvesting was nearly complete in the Central Valley, with only a few fields with unharvested fruit remaining. Good quality, size was reported for all berries. Strawberry picking continued along the central coast. Thinning of persimmons, pomegranates began. Picking of Valencia oranges remained slow. Puff was affecting packouts of the larger fruit. Star Ruby grapefruit harvesting was winding down. Spraying for thrips was completed. Scale sprays continued to be applied to most citrus varieties. Irrigation increased with the arrival of higher temperatures. Olive trees were sprayed in response to increasing problems with olive fruit flies. Walnut, pistachio, almond trees were heavy with nuts. Nut development continued at a steady pace. Early codling moth controls were applied in walnut orchards. Irrigation, cultivation, weed, pest control treatments were ongoing in many nut orchards. Processing tomatoes continued to thrive, with fruit in many fields showing red. Irrigation, cultivation, fertilization, pest control applications continued. The levee break in San Joaquin County resulted in the flooding of some asparagus, processing tomato fields. Planting of peppers, lima beans, melons, and fresh market tomatoes continued. Melon, sweet corn harvesting were underway in the Central Valley. Harvesting of peppers, squash, eggplant, cucumbers, snap beans, and fresh market tomatoes continued. Onions, garlic continued to be harvested in Kern County. The following vegetables were also harvested: bittermelon, bok choy, cardis, carrots, green onions, kabocha, kale, kang kong, kohlrabi, long bean, malabar spinach, marunggai, menthi, okra, ong choy, opo, saluyot, sinqua, spinach, Swiss chard and tomatillos. Rangeland conditions continued to decline throughout most of the State. However, pasture feeds in the far north remained good, due to generally mild weather conditions. Cattle continued to be moved to higher elevation rangeland. Some cattle remained on local irrigated pastures. Feeder cattle were moved to market or shipped to other feedlots for finishing. Sheep in the southern San Joaquin Valley were being moved to summer grazing land. High temperatures led to a drop in milk production in many parts of the Central Valley. Bees were active in seed alfalfa, melon, and other vegetable fields.

COLORADO: Days suitable for fieldwork 4.8. Topsoil 8% very short, 21% short, 67% adequate, 4% surplus. Subsoil 39% very short, 36% short, 25% adequate, 0% surplus. Most of the state received some welcome moisture this week. Precipitation totals along the Front Range, Eastern Plains ranged from .1 to 3.0 inches. Parts of Prowers, Bent counties experienced heavy thunderstorms which brought damaging hail, winds to several farms in the area. Spring wheat 34% headed, 44% 2003, 44% avg.; 2% turning color, 2% 2003, 9% avg.; condition 1% very poor, 4% poor, 31% fair, 54% good, 10% excellent. Spring barley 44% headed, 58% 2003, 58% avg.; 4% turning color, 2% 2003, 10% avg.; condition 1% very poor, 3% poor, 25% fair, 54% good, 17% excellent. Sunflower 77% planted, 76% 2003, 73% avg.; condition 2% poor, 28% fair, 64% good 6% excellent. Alfalfa hay 70% 1st cutting, 65% 2003, 67% avg.; 1% 2nd cutting, 0% 2003, 2% avg.; condition 2% very poor, 6% poor, 34% fair, 48% good, 10% excellent. Dry beans 98% planted, 83% 2003, 91% avg.; 80% emerged, 42% 2003, 66% avg.; condition

1% very poor, 2% poor, 17% fair, 74% good, 6% excellent. Dry onions condition 1% very poor, 3% poor, 16% fair, 62% good, 18% excellent. Summer potatoes 99% emerged, 91% 2003, 97% avg.; condition 1% poor, 20% fair, 53% good, 26% excellent. Fall potatoes 69% emerged, 88% 2003, 86% avg.; condition 2% poor, 38% fair, 48% good, 12% excellent. Sugar beets condition 5% poor, 20% fair, 55% good, 20% excellent.

DELAWARE: Days suitable for fieldwork 5.0. Topsoil 12% short, 77% adequate, 11% surplus. Subsoil 13% short, 87% adequate. Field corn condition 24% fair, 45% good, 31% excellent. Soybean condition 6% fair, 62% good, 32% excellent; 77% planted, 35% 2003, 54% avg.; 70% emerged, 24% 2003, 43% avg. Sorghum 88% planted, 43% 2003, 61% avg. Barley condition 2% very poor, 5% poor, 9% fair, 63% good, 21% excellent; 61% harvested, 5% 2003, 48% avg. Winter wheat condition 4% poor, 15% fair, 64% good, 17% excellent; 100% turned, 55% 2003, 80% avg.; 11% harvested, 0% 2003, 7% avg. Pasture feed 13% fair, 70% good, 17% excellent. Strawberries 100% harvested, 77% 2003, 91% avg. Other hay 1st cutting 98%, 46% 2003, 84% avg.; 2nd cutting 36%, 5% 2003, 19% avg. Alfalfa hay 2nd cutting 16%, 5% 2003, 23% avg. Apple condition 2% poor, 7% fair, 77% good, 14% excellent. Peach condition 2% poor,7% fair,62% good, 29% excellent. Cucumbers 59% planted, 53% 2003, 55% avg. Lima Beans for processing 47% planted, 23% 2003, 46% avg. Snap beans 95% planted, 90% 2003, 78% avg. Sweet corn 77% planted, 71% 2003, 81% avg. Green Peas 71% harvested, 38% 2003, 53% avg. Tomatoes 91% planted, 70% 2003, 85% avg. Cantaloups 93% planted, 69% 2003, 80% avg. Hay supplies 23% short, 67% adequate, 10% surplus. Scattered rain showers detered farmers from being in the field two days this week to plant, harvest. Corn, soybeans, sorghum are almost complete in the planting process as barley is almost complete in the harvesting process. Winter wheat is 100% turned compared to 88% the previous week, is beginning to be harvested. Farmers are getting the second cutting of other hay as 36% is cut compared to 17% last week.

FLORIDA: Topsoil 5% very short, 25% short, 60% adequate, 10% surplus. Subsoil 5% very short, 30% short, 60% adequate, 5% surplus. Temperature average 1 to 3° above normal; several record highs set. Daytime highs: 80s, 90s. Nighttime lows: 70s. Rainfall: less than 0.10 in. Immokalee to nearly 7.00 in. Jacksonville; several Panhandle, Peninsula localities reported 2.00 to 4.00 in.; some central, southeast coastal localities reported less than 0.33 in. Peanuts 45% pegged, 34% 2003, 39% 5-yr avg.; condition 1% poor, 19% fair, 65% good, 15% excellent. Jefferson County producers preparing to dig green peanuts; expected to begin early July. Recent wet weather caused some tobacco foliar disease, Jefferson County. Tobacco harvesting underway, Taylor County. Irrigated corn acreage in very good condition, Panhandle. Oldest cotton plants, Santa Rosa County, showing good retention of squares. Abundant rainfall delayed some hay making, Panhandle, northern Peninsula. Scattered rains raised soil moisture supplies in some areas; continued drought lowered supplies in others. Surplus moisture: Holmes, Washington, Jackson. a few spots in Marion, Seminole counties. Very short moisture: some areas of St. Lucie, Broward counties. Some localities, Big Bend area, northern Peninsula, southeastern coast still suffering from drought; wildfire danger still high. Tomatoes: Quincy remains active, central area harvesting declining seasonally. Some producers, Jefferson County, experienced foliar disease in watermelons. Other vegetables, non-citrus fruit available: cantaloupe, sweet corn, cucumbers, okra, peppers. Hot, dry weather pattern, citrus areas, continues with arrival of thunderstorms; temperatures moderate to hot; widely scattered rainfall; most areas received some rain. Harvest complete on early-mids, declining on Valencias, grapefruit mostly complete, tangerines complete. Pasture feed: Poor 5%, Fair 60%, Good 35%. Cattle condition: Poor 5%, Fair 44%, Good 50%, Excellent 1%. Pasture, range condition improved, Panhandle through central areas, following good rainfall. North: pasture, hayfield condition improved; mid-90s temperatures great for pasture, range grass growth. Southwest: range condition fair to good due to drought. Statewide: cattle condition fair to good.

GEORGIA: Days suitable for field work 4.7. Soil 5% very short, 21% short, 66% adequate, 8% surplus. Corn 33% dough, 29% 2003, 38% avg.; 3% dent, 3% 2003, 10% avg. Hay 2% very poor, 16% poor, 41% fair, 38% good, 3% excellent. Peanuts 54% blooming, 48% 2003, 50% avg. Sorghum 10% poor, 39% fair, 44% good, 7% excellent; 77% planted, 84% 2003, 84% avg. Soybeans 7% blooming, 3% 2003, 5% avg. Tobacco 5% very poor, 21% poor, 42% fair, 29% good, 3% excellent; 2% harvested, 3% 2003, 4% avg. Watermelons 1% very poor, 6% poor, 40% fair, 44% good, 9% excellent; 23% harvested, 21% 2003, 24% avg. Apples 4% poor, 24% fair, 56% good, 16% excellent. Peaches 18% poor, 24% fair, 52% good, 6% excellent; 39% harvested, 35% 2003, 37% avg. Pecans 2% very poor, 9% poor, 44% fair, 42% good, 3% excellent. Welcomed showers fell across the State last week. Scattered showers brought moisture amounts of a trace to over 5 inches of rain. Moisture helped replenish ponds, streams, improved crop conditions. Areas of the State are still in need of more moisture for crops, pastures. Frequent showers caused problems for producers trying to control weeds. Fungicides, insecticides were applied to peanuts, cotton and tobacco. Cotton producers sprayed growth regulators and continued side-dressing cotton, as weather permitted. Tobacco plants were topped, Tomato Spotted Wilt Virus remained a problem for tobacco growers. Vegetable growers neared completion of squash harvest, started harvesting sweet corn, bell peppers. Wheat, hay harvest continued. Rains allowed some producers to replant soybeans, helped recover dry land corn. Activities: Berry harvest, preparation for millet planting, the routine care of livestock and poultry.

HAWAII: Warm, dry days with scattered light evening, early morning showers continued to benefit crop progress throughout the State. Trade winds were light to moderate for most of the week. Temperatures were relatively warm with daytime highs in the mid- to upper 80s. Rainfall was light with most of the showers concentrated in windward, upper elevation areas. Banana, papaya orchards were in mostly fair-to-good condition with steady harvesting. Trees continued to recover from previous weeks' wet, windy weather. Disease control was active. Vegetable crops made generally good progress. Spraying continues to control increasing insect pressure. Harvesting of head cabbage, dry onions, cucumbers, and Chinese cabbage will be steady.

IDAHO: Days Suitable for Fieldwork 6.6. Topsoil 26% short, 72% adequate, 2% surplus. Most of the state's crops are reported to be in good condition. Recent rains have helped improve crop conditions. Warmer weather is needed to aid crop growth. Winter Wheat jointed 98%; Boot Stage 92%. Spring Wheat Jointed 80%; Boot Stage 52%. Barley Jointed 80%; Boot Stage 48%. Dry Beans emerged 96%, 84% 2003, 82% avg. Potatoes emerged 93%, 92% 2003, 94% avg. Potatoes 12" High 19%, 26% 2003, 32% avg. Potato condition 1% poor, 7% fair, 78% good, 14% excellent. Cherries harvested 24%, 8% 2003, 6% avg. Alfalfa Hay 1st Cutting Harvested 61%, 76% 2003, 70% avg. Irrigation Water Supply 2% very poor, 16% poor, 47% fair, and 35% good. Activities: Feeding, caring for livestock, cultivating sugarbeets, potatoes, and cutting alfalfa hay.

ILLINOIS: Days suitable for fieldwork 4.3. Topsoil 3% short, 72% adequate, 25% surplus. Corn 100% emerged, 98% 2003, 99% avg.; height 46 inches, 22 in. 2003, 27 in. avg.; Soybeans 4% blooming, 1% 2003, 2% avg. Wheat 98% turning yellow, 88% 2003, 91% avg.; 79%; ripe, 46 2003, 60% avg.; 39%; harvested, 13% 2003, 21% avg. Oats 90% headed, 63% 2003, 81% avg.; 60% filled, 25% 2003, 43% avg.; 20% turning yellow, 5% 2003, 11% avg.; 7% ripe, 1% 2003, 3% avg.; 2% very poor, 5% poor, 24% fair, 50% good, 19% excellent. Alfalfa 94% first cut, 94% 2003, 90% avg.; 20% 2nd cut, 10% 2003, 14% avg.; 2% poor, 20% fair, 58% good, 20% excellent .Red clover 91% cut, 86% 2003, 81% avg.; 1% poor, 23% fair, 58% good, 18% excellent. Precipitation was only slightly higher than normal last week, with a few rain showers early in the week. The drier weather aided in corn, soybeans continuing to progress at a more rapid pace. While insects are not the major problem yet, most farmers are having trouble with weeds. Soybean post emergence spraying, mowing are the predominant farm activities.

INDIANA: Days suitable for fieldwork 2.2. Topsoil 1% short, 51% adequate, 48% surplus. Subsoil 3% short, 61% adequate, 36% surplus. Field activities slowed by rain, thunderstorms, wet field conditions. Heavy rain again in some areas. Large ponds in some fields. Severe flooding has occurred along river bottom fields. Soils are very wet and will take several days to dry out. Some replanting will be necessary. Harvesting wheat, baling hay, spraying herbicides were major activities. Weeds still a problem in many soybean fields. Temperatures averaged 2° below to 7° above normal for the week. Precipitation averaged 0.35 to 2.96 inches. Winter wheat harvest gaining momentum southwestern region. Early planted corn fields look good, growing rapidly. Corn, soybean damage in ponds. Wheat fields turning color in the northern region. Tobacco plants 76% set, 53% 2003, 77% avg. Alfalfa hay 1st cutting 81% complete, 80% 2003, 89% avg. Pastures 1% very poor, 3% poor, 15% fair, 64% good, 17% excellent. Livestock in mostly good condition, some stress from the wet weather. Cooler weather during weekend has helped. Feedlots muddy. Activities: Cleaning up, repairing equipment, hauling grain to market, scouting fields, mowing roadsides, hauling manure and taking care of livestock.

IOWA: Days suitable for fieldwork 3.2. Topsoil 71% adequate, 29% surplus across the state.. Subsoil 3% short, 74% adequate, 23% surplus. The state experienced another week of wet weather. The weather hindered the first alfalfa harvest, spraying of soybean fields. The wet weather continued to stress crops in many areas. Operators cited the need for warm weather. Field Crops Report: The corn stand was reported as 94 % normal. The average corn height was 26

inches, while the tallest corn height was 36 inches. Corn condition 2% very poor, 6% poor, 19% fair, 55% good, 18% excellent. Soybean condition 2% very poor, 6% poor, 22% fair, 54% good, 16 % excellent. Oat acreage 81% headed, 54% the previous week, 71% 5-yr avg.; condition 2% poor, 20% fair, 62% good, 16% excellent. Alfalfa 1st cutting 83% complete, 68% 78% the previous week and 2 days ahead of the 5-year average of. Hay condition 1% very poor, 4% poor, 16% fair, 53% good, 26% excellent. Livestock, Pasture, Range Report: Overall, livestock conditions were good except for flies bothering some cattle. Pasture, range feed 3% poor, 15% fair, 52% good, 30% excellent.

KANSAS: Days suitable for fieldwork 2.3. Topsoil 5% very short, 12% short, 56% adequate, 27% surplus. Subsoil 20% very short, 33% short, 43% adequate, 4% surplus. Widespread showers have improved soil moisture conditions Statewide. Wheat 100% turning, 98% 2003, 98% avg.; 92% ripe, 43% 2003, 62% avg. Wheat harvest was delayed due to heavy rains. Sorghum 76% emerged, 69% 2003, 77% avg. Sunflowers 47% emerged, 54% 2003, 56% avg. Alfalfa 2nd cutting 30%, 19% 2003, 28% avg. Range, pasture feed 18% very poor, 24% poor, 22% fair, 30% good, 6% excellent. Feed grain supplies 3% very short, 13% short, 81% adequate, 3% surplus. Hay, forage supplies 3% very short, 16% short, 75% adequate, 6% surplus. Stock water supplies 5% very short, 22% short, 67% adequate, 6% surplus.

KENTUCKY: Days suitable fieldwork 2.4. Topsoil 1% short, 45% adequate, 54% surplus. Subsoil 56% adequate, 44% surplus. Most of the state has now had four consecutive weeks of above normal rainfall. The State received an average of 1.16 in. of rain which was 0.27 in. above normal. Due to the continued rains, farm work across the State was minimal. When farmers were able to get into their fields, they took the opportunity to set tobacco, plant soybeans, cut, bale hay, or harvest wheat. Burley 87% set, 74% 2003, 90% avg. Dark tobacco 85% set, 91% 2003, 95% avg. Tobacco height 70% under 12 in., 24% between 12-24 in., 6% above 24 in. Condition of set tobacco 2% very poor, 10% poor, 26% fair, 53% good, 9% excellent. There are reports blue mold, other diseases in scattered areas around the State. Grain sorghum seeding at 82% complete. Winter wheat harvest underway at 32%, 19% 2003, 43% avg. Rain has delayed harvesting, as a result yield and test weights may decline. Pasture feeds 3% poor, 14% fair, 59% good, 24% excellent. Barley 94% harvest, 82% 2003, 92% avg. Alfalfa hay 2nd cutting of at 18%. Some replanting of corn, but most low lying areas too wet. Producers trying to finish planting full season soybeans, planting double crop soybeans as small grains are harvested between showers.

LOUISIANA: Days suitable for fieldwork 2.9. Soil 3% short 60% adequate, 37% surplus. Corn 4% poor, 28% fair, 52% good, 16% excellent; 97% silked, 89% last week, 95% 2003, 90% avg.; 18% dough stage, 0% last week, 15% 2003, 34% avg. Cotton 100% emerged, 99% last week, 100% 2003, 100% avg. Hay 1st cutting 73%, 58% last week, 88% 2003, 88% avg. Peaches 24% harvested, 17% last week, 31% 2003, 39% avg. Sorghum 99% emerged, 98% last week, 98% 2003, 99% avg. Soybeans 30% blooming, 21% last week, 17% 2003, 27% avg.; 7% setting pods. Spring plowing 100% plowed, 99% last week, 100% 2003, 100% avg. Sugarcane 1% very poor, 7% poor, 26% fair, 34% good, 32% excellent. Sweet potatoes 64% planted, 54% last week, 69% 2003, 84% avg. Wheat 100% harvested, 92% last week, 98% 2003, 99% avg. Livestock 1% very poor, 2% poor, 30% fair, 59% good, 8% excellent. Vegetable 2% very poor, 9% poor, 44% fair, 43% good, 2% excellent.

MARYLAND: Days suitable for fieldwork 5.0. Topsoil 5% short, 75% adequate, 20% surplus. Subsoil 6% short, 78% adequate, 16% surplus. Field corn condition 12% fair, 47% good, 41% excellent. Soybean condition 3% poor, 14% fair, 69% good, 14% excellent; 84% planted, 40% 2003, d 65% avg.; 61% emerged, 29% 2003, 54% avg. Sorghum 90% planted, 40% 2003, 74% avg. Barley condition 8% fair, 51% good, 41% excellent; 67% harvested, 1% 2003, 47% avg. Winter wheat condition 3% poor, 21% fair, 54% good, 22% excellent; 96% turned, 48% 2003, 80% avg.; 13% harvested, 0% 2003, 9% avg. Pasture feed 4% poor, 18% fair, 49% good, 29% excellent. Tobacco 80% transplanted, 67% 2003, 84% avg. Strawberries 95% harvested, 74% 2003, 87% avg. Other Hay 1st cutting 91%, 34% 2003, 82% avg.; 2nd cutting 5%, 0% 2003, 17% avg. Alfalfa Hay 2nd cutting 23%, 1% 2003, 25% avg. Apple condition 2% fair, 60% good, 38% excellent. Peach condition 5% fair, 53% good, 42% excellent. Cucumbers 43% planted, 48% 2003, 67% avg. Lima Beans for processing 75% planted, 42% 2003, 56% avg. Snap beans 71% planted, 66% 2003, 73% avg. Sweet corn 96% planted, 78% 2003, 92% avg. Green Peas 59% harvested, 32% 2003, 61% avg. Tomatoes 93% planted, 87% 2003, 96% avg. Cantaloups 89% planted, 84% 2003, 93% avg. Hay supplies 8% very short, 15% short, 76% adequate, 1% surplus. Thunderstorms, wet weather hindered ambitious farmers two days this past week as they are in the midst of planting, harvesting. The weather did not help the hay crop as the wet, humid weather continued to decrease hay quality. The weather did give a boost to wheat turning color as it is 96% turned compared to 75% the previous week. Vegetable planting is progressing as corn, soybean planting is almost complete.

MICHIGAN: Days suitable for fieldwork 4. Subsoil 0% very short, 1% short, 66% adequate, 33% surplus. Corn 95% emerged, 100% 2003, 97% avg. Corn height 12 inches. Winter Wheat 19% turning. Barley 1% very poor, 12% poor, 43% fair, 44% good, 0% excellent. Oats 5% very poor, 8% poor, 36% fair, 44% good, 7% excellent; 31% headed, 19% 2003, 38% avg. Potatoes 90% emerged. All hay 2% very poor, 7% poor, 28% fair, 52% good, 11% excellent; 1st cutting hay 48%, 61% 2003, 57% avg. Dry beans 68% planted, 66% 2003, 67% avg.; 12% emerged, 16% 2003, 33% avg. Asparagus 98% harvested, 95% 2003, 95% avg. Strawberries 71% harvested. Intermittent rain showers kept soils wet. Scattered hail reported several districts. Cool temperatures, coupled with limited sunshine, hampered drying of fields. Precipitation amounts ranged from 0.16 inches west central Lower Peninsula to 1.07 inches central Lower Peninsula. Eight of nine districts above normal for accumulated precipitation since April 1. The west central Lower Peninsula is 5.51 inches ahead of its historic average. Temperatures ranged from 1^0 below normal four of State's districts to 2^0 above normal central Lower Peninsula. Seven of eight Lower Peninsula districts now at or above average for cumulative corn growing degree days (GDDs). However, farmers reported that they needed still more sunshine and warmer temperatures for crops to make use of all moisture received. Continued precipitation and poor drying conditions pushed growers to complete their fieldwork in a timely manner. Increased insect activity reported south central. Corn planting mostly completed southern part of State, a few farmers hoping to get a bit more seed in ground if weather cooperated. Spraying, cultivating continued where topsoil dry enough. Corn growth, development highly variable, many producers reporting very uneven fields. Rain, limited drying days slowed haying progress. Much of crop mature, quality declined rapidly. Operators able to put up some haylage. Dry hay extremely difficult to make. Growers continued to plant, spray soybeans. Farmers reported uneven growth and variable development, similar to conditions noted corn crop. The wheat crop moved along towards maturity. Disease problems noted, reports mixed on quality of crop. Dry bean planting continued, some early plantings had emerged. Sugarbeet producers continued to spray, cultivate where possible. Rainy, cooler weather has caused increased fruit diseases. The excess precipitation caused standing water to be a problem for many growers throughout State. Apple growth continued to advance quickly southeast, with sizes up to 1.5 inches diameter. The majority of State reported sizes of approximately 1.25 inches. Plum curculio persisted west, continuing to lay eggs. Potato leaf hopper also a problem. European red mite numbers decreased throughout week. Peaches infected with peach tree borer and plum curculio, while pears infested with codling moth, leaf roller. Bacterial canker continued to cause problems for sweet cherries. Cherry leaf spot increased southeast. Across State, tart cherries began to color late last week. In west, bloom ended grapes. For majority of State, blossom continued. Black rot and downy mildew all common due to amount of rain. Raspberries showed signs of leaf roller damage. Green fruit increased size. An excellent strawberry crop reported southeast. In northern areas of State, standing water and grey mold hampering harvest. Across State, primary vegetable growing areas had another week of less than optimal growing conditions. Crop progress highly variable across geographic regions. A band of hail that rolled through southwest caused some damage. Asparagus harvest neared completion. Growers west central reported a decent week of picking. Pepper growth hampered by cool, wet weather. Celery planting back on schedule. Harvest of early hearts expected to begin coming week. Some onion maggot damage reported. Spring spinach harvest began. In southeast, growers picking leaf, romaine lettuce as well as some radishes. Also southeast, early potatoes full bloom and producers started tying tomatoes. In southwest, harvest of cucumbers, zucchini, yellow squash began.

MINNESOTA: Days suitable for fieldwork 4.0. Topsoil 2% very short, 4% short, 69% adequate, 25% surplus. Canola 95% planted, 99% 2003, 99% avg. Dry Beans 99% planted, 99% 2003, 98% avg. Sweet corn 84% planted, 90% 2003, 90% avg. Spring wheat 60% jointed, 81% 2003, 61% avg. Barley 48% jointed, 82% 2003, 61% avg. Oats 72% jointed, 85% 2003, 75% avg. Corn 13 in. height, 15 in. 2003, 14 in. avg. Soybeans 4 in. height, 5 in. 2003, 5 in. avg. Alfalfa 61% 1^{st} cutting, 80% 2003, 76% avg. Pasture feed 3% very poor, 6% poor, 29% fair, 51% good, 11% excellent. Alfalfa 2% very poor, 11% poor, 33% fair, 44% good, 10% excellent. Crop progress remains behind normal due to cool temperatures this past week. Some producers are still finding it difficult to get into fields to bale hay because of standing water. Warm, dry conditions are needed for crops to catch up.

MISSISSIPPI: Days suitable for fieldwork 3.0. Soil 2% short, 73% adequate, 25% surplus. Corn 80% silked, 67% 2003, 68% avg.; 1% very poor, 1% poor, 12%

fair, 52% good, 34% excellent. Cotton 100% emerged, 99% 2003, 100% avg.; 54% squaring, 42% 2003, 60% avg.; 1% very poor, 2% poor, 20% fair, 54% good, 23% excellent. Rice 1% heading, 0% 2003, 1% avg.; 1% poor, 13% fair, 63% good, 23% excellent. Sorghum 17% heading, 11% 2003, 11% avg.; 16% fair, 71% good, 13% excellent. Soybeans 100% planted, 98% 2003, 99% avg.; 99% emerged, 94% 2003, 96% avg.; 56% blooming, 36% 2003, 33% avg.; 33% setting pods, 2% 2003, 4% avg.; 2% poor, 14% fair, 57% good, 27% excellent. Wheat 98% mature, 100% 2003, 100% avg.; 91% harvested, 85% 2003, 87% avg. Hay 98% harvested (Cool Season), 99% 2003, 100% avg.; 27% harvested (Warm Season), 41% 2003, 37% avg.; 2% poor, 27% fair, 52% good, 19% excellent. Watermelons 100% planted, 100% 2003, 100% avg.; 5% poor, 25% fair, 64% good, 6% excellent. Sweetpotatoes 70% planted, 66% 2003, 70% avg. Cattle 4% poor, 21% fair, 51% good, 24% excellent. Pasture 8% poor, 22% fair, 54% good, 16% excellent. Once again, rain showers prevailed throughout most of the state, preventing a majority of fieldwork from being accomplished. Despite the lack of post-emergence herbicide applications, row crops in general are doing well. Drier weekend weather allowed sweetpotato producers to make tremendous progress with planting.

MISSOURI: Days suitable for fieldwork 3.2. Topsoil 6% short, 70% adequate, 24% surplus. Farmers were again hampered in their efforts to harvest wheat, hay and finish late row crop planting, but progress still compares favorably with recent years. The northwest, north-central, west-central districts are the wettest areas with surplus ratings of about 50%. Soybean planting ranges from 57% in the west-central district to 87% or more in all other districts, with the southeast most advanced at 95%. Some of the acreage remaining to be planted will be double-crop beans after wheat harvest but single-crop bean planting is still going on in many northern counties. Sorghum planting ranges from 77% in the central district to virtually complete in the northwest, south-central and southeast districts. Harvesting of wheat varies from barely beginning in the northwest and north-central districts to 83% in the southeast. Alfalfa hay first cutting 90%, 94% 2003, 92% avg. Other hay cut 61%, 65% 2003, 64% avg. Pastures 1% very poor, 3% poor, 18% fair, 61% good, 17% excellent. Rainfall averaged 1.00 inch, ranging by area from less than 0.51 inch in the northeast district to 1.82 inches in the west-central district.

MONTANA: Montana had a good mix of precipitation and sunshine for the week ending June 21st 2004. Days suitable for fieldwork were 5.4. Topsoil moisture conditions were rated 9% very short, 22% short, 64% adequate and 5% surplus compared to last year which was rated 6% very short, 16% short, 73% adequate and 5% surplus. Subsoil moisture is rated 29% very short, 33% short, 37% adequate, and 1% surplus compared to last year during which subsoil moisture was rated 13% very short, 29% short, 55% adequate, and 3% surplus. Winter wheat conditions are rated 4% very poor, 12% poor, 29% fair, 44% good, and 11% excellent. Winter wheat progress is 94% boot stage and 67% headed, compared to last year at 91% and 62% respectively. Winter wheat is now 1% turning compared to 0% last year. Spring wheat is 100% emerged compared with 99% for last year and 98% for the five-year average. Spring wheat boot stage is 16% compared to 20% for last year and 28% for the five-year average, and is now 16% boot stage compared to 20% last year and 28% for the five-year average. Spring wheat condition is rated 1% very poor, 6% poor, 29% fair, 60% good, 4% excellent. Durum wheat is 95% seeded compared with 99% last year. Durum wheat emergence is at 79% compared to 93% for last year, and is now 1% headed compared to 9% last year. Durum wheat condition is rated 1% very poor, 7% poor, 26% fair, 58% good, 8% excellent. Barley is 42% boot stage compared to 23% from last year and 35% for the five-year average, and is now 6% headed compared to 5% for last year. Barley condition is rated 1% very poor, 5% poor, 31% fair, 53% good, and 10% excellent. Oats are 99% emerged and 27% boot stage, compared to last year at 98% and 25% respectively. Oats are now 3% headed compared to 5% for last year. Oat condition is rated 2% very poor, 10% poor, 41% fair, 44% good, and 3% excellent. Sugar beet condition is 7% very poor, 15% poor, 44% fair, 29% good, and 5% excellent. Corn emergence is 98% compared to 99% for both last year and the five-year average. Corn condition is rated 6% very poor, 8% poor, 53% fair, 31% good, and 2% excellent. Dry bean emergence is 96% compared to last year's 98% and 96% for the five-year average. Potatoes are 100% planted compared to 100% for last year and 99% for the five-year average. Potatoes are 47% emerged compared to 83% from last year and 74% for the five-year average. Alfalfa hay first cutting is 15% compared to 19% for last year and 14% for the five-year average. Other hay first cutting is 9% compared to 11% for last year and 6% for the five-year average. Lambing is 99% complete, compared to 98% for last year and 99% for the five-year average. Range and pasture feed conditions are rated 15% very poor, 26% poor, 33% fair, 22% good, and 4% excellent. Livestock cattle and calves are 93% moved to summer ranges compared to 94% for both last year and the five-year average. Sheep and lambs are 88% moved to summer ranges compared to 93% for last year and 92% for the five-year average.

NEBRASKA: Days suitable for fieldwork 3.5. Topsoil 12% very short, 21% short, 60% adequate, 7% surplus. Subsoil 32% very short, 26% short, 41% adequate, 1% surplus. Temperatures averaged from 5 to 13° below normals for the week. Precipitation was statewide with amounts ranging to over three inches in several locations. Lightest amounts were generally recorded along the eastern border of the state and in the Panhandle. Wheat turning color 79%, 59% 2003, 57% avg.; ripe 14%, 1% 2003, 12% avg. Dry beans 93% planted, 89% 2003, 94% avg. Proso millet 80% planted, 66% 2003. Alfalfa condition 5% very poor, 13% poor, 30% fair, 40% good and 12% excellent; 1st cutting 90% harvested, 90% 2003, 91% avg.; 2nd cutting 3%, 1% 2003, 4% avg. Activities: Weed control and hay harvest.

NEVADA: Isolated thunderstorms passed through the State at midweek, dropping significant precipitation in some localities while missing others completely. Ely recorded .46 inch of rain but Elko, Winnemucca recorded none. Reno recorded .01 inch. Temperatures averaged slightly above normal for the week. Alfalfa first cutting continued in the north, some was damaged by rains. Growers were still raking hay that had been rained on the previous week. Second cutting of alfalfa was underway south. Small grains were heading out. Some rye was cut for hay. Wild, other tame hay was also being harvested. Hay crop condition was generally fair to good except in Lovelock where short water supplies are limiting irrigation. Corn fields were being cultivated for weed control. Cricket, grasshopper abatement continued. Insect populations were rising. Herbicides were being applied to noxious weeds. Bulls were being turned out with herds. Activities: Haying, cultivating, field spraying, irrigating.

NEW ENGLAND: Days suitable for field work 6.1. Topsoil 12% short, 81% adequate, 7% surplus. Subsoil 6% short, 84% adequate, 10% surplus. Pasture feed 2% poor, 10% fair, 67% good, 21% excellent. Maine Potatoes 55% emerged, 70% 2003, 75% avg.; condition excellent/good. Rhode Island Potatoes 100% emerged, 100% 2003, 99% avg.; condition good/excellent. Massachusetts Potatoes 100% emerged, 100% 2003, 99% avg., condition good. Maine Oats 100% emerged, 95% 2003, 99% avg.; condition excellent/good. Maine Barley 100% emerged, 99% 2003, 99% avg.; condition good. Field corn 95% planted, 90% 2003, 90% avg.; 85% emerged, 70% 2003, 80% avg.; condition good. Sweet corn 95% planted, 80% 2003, 85% avg.; 80% emerged, 60% 2003, 75% avg.; condition good. Shade tobacco: condition good. Broadleaf tobacco 85% transplanted, 70% 2003, 75% avg.; condition good. First Crop Hay 60% harvested, 30% 2003, 50% avg.; condition good/fair. Apples: condition fair/good. Peaches condition poor in Massachusetts, fair/good elsewhere. Pears condition poor in Massachusetts, good/fair elsewhere. Strawberries: Petal Fall; fruit set avg.; condition good/fair. Massachusetts Cranberries: Early Bloom/Full Bloom; condition good/fair. Highbush Blueberries: Petal Fall; fruit set avg; condition fair/good. Maine Wild Blueberries: Petal Fall; fruit set avg.; condition fair. A second week of mostly hot, dry temperatures prevailed throughout the state. The warmer temperatures made ideal conditions for crop growth, development. Scattered showers were received during the week in most locations which kept soil moisture at mostly adequate levels. Activities: Planting vegetables, sweet corn, field corn, tobacco; hilling potatoes; harvesting strawberries, beets, early summer squash, spinach, asparagus, radishes, rhubarb; making hay, mowing; cultivating weeds; side dressing fields with fertilizer; scouting fields for pests and applying pesticides.

NEW JERSEY: Days suitable for field work 6.0. Soil 2% short, 98% adequate. There were measurable amounts of rainfall during the week across most of the state. Temperatures across the state were above normal, until Sunday, June 20, 2004, when temperatures fell to below normal. Farmers were busy cultivating, planting, harvesting, spraying, cutting hay. Soybean planting activities continued across the state. The first cutting of alfalfa, other hay harvest was near completion. Vegetables were rated in mostly good condition. Harvest of cabbage, zucchini, yellow squash continued across the state. Worm infestation, in some cabbage fields, was reported, but treatments were effective. Cucumber harvest continued in the south. Sweet corn harvest started began in some southern fields. Potato plants were flowering well in the central district with lush vines reported. Potato plants were past the flowering stage in southern fields. Apple fruit quality was rated as good, but there were some reports of pollination problems. Peaches were sizing well in the northern and central districts. Cranberry plants were past bloom stage with plants reported in good condition. Strawberry harvest activities continued in the north with excellent quality and favorable fruit size. Strawberry harvest activities were winding down in southern areas of the state. Blueberry harvest began in some areas with excellent quality reported. Livestock producers kept pasture rotation on schedule in response to seasonal forage growth.

NEW MEXICO: Days suitable for fieldwork 6.8. Topsoil 37% very short, 41% short, 22% adequate. The week began hot but ended with temperatures closer to normal. Early in the week, temperatures topped 100° at lower elevation stations in the east, south. Carlsbad hit 105° on the 14th and 15th. Hit, miss thunderstorms were mainly confined to the eastern half of the state, with the greatest amount of activity in the northeast. Some of the storms were accompanied by hail. Greatest precipitation totals for the week included 2.49 inches at Raton, 1.10 inches at Des Moines, and 1.09 inches at Clayton. Farmers were busy irrigating, harvesting crops, finishing the 1st cutting of alfalfa, weeding. Some wind damage 15% light, 12% moderate, 1% severe . Alfalfa conditions 1% poor, 41% fair, 46% good, 12% excellent. Alfalfa 2nd cutting 90% completed, 10% 3rd cutting got underway. Cotton conditions declined slightly with 6% poor, 34% fair, 49% good, 11% excellent; 52% squaring, 2% bolls setting. Corn conditions remained stable 25% fair, 67% good, 8% excellent. All corn has emerged to date. Sorghum 59% planting, conditions 7% poor, 66% fair, 25% good, 2% excellent. Wheat conditions improved slightly from the previous week 6% very poor, 27% poor, 41% fair, 23% good, 3% excellent; 38% wheat harvested. Peanuts 40% pegging. Chile remained stable with 26% fair, 74% good. Onion conditions 40% fair, 49% good, 11% excellent; 45% harvested. Apple conditions 25% poor, 75% fair. Pecans 25% fair, 38% good, 37% excellent; 98% nut set average, 2% heavy. Ranchers spent the week moving, maintaining herds, maintaining waters. Cattle conditions were 4% very poor, 17% poor, 33% fair, 37% good, 9% excellent. Sheep conditions 11% very poor, 17% poor, 46% fair, 26% good. Range, pasture feeds continued to 21% reported very poor, 39% poor, 37% fair, 3% good.

NEW YORK: Days suitable for fieldwork 5.1. Soil 4% short, 76% adequate, 20% surplus. Pasture feeds 2% poor, 9% fair, 48% good, 41% excellent. Winter wheat conditions 2% poor, 12% fair, 54% good, 32% excellent. Oats 3% poor, 18% fair, 52% good, 27% excellent. Hay 8% poor, 13% fair, 52% good, 27% excellent. Corn 95% complete, 86% 2003. Clover-timothy 54% harvested, 40% 2003. Grass silage 75% harvested, 52% 2003. Alfalfa 1st cutting 70% finished, 43% 2003. Soybeans 87% planted, 67% 2003. Dry beans were 58% planted, potatoes were nearing completion. Apples 3% poor, 15% fair, 59% good, 23% excellent. Grapes 10% poor, 13% fair, 46% good, 31% excellent. Peaches 15% poor, 20% fair, 43% good, 22% excellent. Pears 3% poor, 20% fair, 56% good, 21% excellent. Sweet cherries 8% poor, 24% fair, 40% good, 28% excellent. Tart cherries 30% poor, 21% fair, 28% good, 21% excellent. Sweet corn, snap beans, cabbage were well over 50% planted. Strawberries, onions appeared to be in good condition. No problems reported with livestock.

NORTH CAROLINA: Days suitable for field work 5.3. Soil 3% very short, 18% short, 68% adequate, 11% surplus. Activities: Soybeans, sweetpotatoes, sorghum, burley tobacco, spraying for disease, pests, harvesting small grains, hay, general farm maintenance. Afternoon showers, thunderstorms continued to dominate the weather, limiting field work in some areas. The rainfall helped improve soil moisture across the State. However, heavy downpours in a few areas delayed soybean and sorghum planting. Insect, disease problems continue to appear in various crops.

NORTH DAKOTA: Days suitable for fieldwork 5.9. Topsoil 11% very short, 13% short, 54% adequate, 22% surplus. Subsoil 14% very short, 14% short, 50% adequate, 22% surplus. Cool temperatures statewide slowed late season crop progess. Much of the western half of the state experienced below freezing temperatures on one or two nights last week. Warmer temperatures, sunshine are needed to aid crop development. Barley 51% jointed or beyond, 68% 2003, 53% average; 21% was in the boot stage or beyond, 31% 2003, 21% average. Durum wheat 90% planted, 100% 2003, 100% average; 84% emerged or beyond, 99% 2003, 96% average; 35% jointed or beyond, 40% 2003, 29% average; 10% was in the boot stage or beyond, 12% 2003, 9% average; 1% was headed or beyond, 4% 2003, 2% average. Hard red spring wheat 57% jointed or beyond, 64% 2003, 57% average; 24% was in the boot stage or beyond, 34% 2003, 26% average. Oats 99% average, 63% jointed or beyond, 62% 2003, 56% average, 24% was in the boot stage or beyond, 26% 2003, 24% average. Canola 28% was in the rosette stage or beyond, 69% 2003, 62% average; 6% was blooming or beyond, 19% 2003, 11% average. Dry Edible Beans 97% planted, 99% 2003, 100% average; 77% emerged or beyond, 88% 2003, 92% average. Flaxseed 96% planted, 99% 2003, 100% average; 90% emerged or beyond, 97% 2003, 97% average. Potatoes 84% emerged or beyond, 86% 2003, 89% average. Sunflower 72% emerged or beyond, 79% 2003, 82% average. Emerged crop conditions ratings: Canola 3% very poor, 5% poor, 28% fair, 52% good, 12% excellent; Durum wheat 2% very poor, 8% poor, 24% fair, 62% good, 4% excellent; Dry edible beans 1% very poor, 3% poor, 37% fair, 53% good, 6% excellent; Flax 3% very poor, 6% poor, 32% fair, 54% good, 5% excellent; Potatoes 1% very poor, 1% poor, 31% fair, 55% good, 12% excellent; Sugarbeets 1% very poor, 3% poor, 26% fair, 63% good, 7% excellent; Sunflower 3% very poor, 6% poor, 37% fair, 49% good, 5% excellent; Hay 18% very poor, 17% poor, 28% fair, 32% good, 5% excellent. Broadleaf and wild oats spraying were 68% and 77% complete respectively. Stockwater supplies were rated 4% very short, 14% short, 76% adequate, 6% surplus. Range and pasture conditions were rated 15% very poor, 18% poor, 27% fair, 32% good, 8% excellent.

OHIO: Days suitable for field work 0.8. Topsoil 0% very short, 0% short, 21% adequate, 79% surplus. Alfalfa hay 1st cutting complete 57%, 36% 2003, 73% avg.; 2nd cutting complete 2%, 1% 2003, 6% avg. Corn 100% emerged, 98% 2003, 98% avg. Cucumber 48% planted,48 % 2003, 70% avg. Oats 57% headed, 57% 2003, 65% avg. Other hay 1st cutting complete 40%, 29% 2003, 62% avg. Processing Tomatoes planted 89%, 98% 2003, 97% avg. Soybeans 91% planted, 86% 2003, 94% avg.; 85% emerged , 81% 2003, 87% avg. Strawberries 85% harvested, 58%, 2003, 72% avg. Winter Wheat 90% turning color, 46% 2003, 70% avg.; 2% ripe, 0% 2003, 3% avg. Corn conditions 4% very poor, 9% poor, 23% fair, 44% good, 20% excellent. Hay conditions 7% very poor, 14% poor, 34% fair, 39% good, 6% excellent. Oats conditions 8% very poor, 10% poor, 27% fair, 46% good, 9% excellent. Pasture feeds 1% very poor, 6% poor, 26% fair, 52% good, 15% excellent. Soybean conditions 5% very poor, 9% poor, 30% fair, 44% good, 12% excellent. Strawberry conditions 3% very poor, 10% poor, 29% fair, 42% good, 16% excellent. Winter wheat conditions 3% very poor, 8% poor, 33% fair, 45% good, 11% excellent. Unfortunately excess rain has been a complete wipe-out for field operations, continues to put planting and spraying at a standstill. Repairing equipment, mowing weeds, and replanting crops in needed areas were about the only things that could occur in-between the unpredictable thunderstorms. Soil saturation also created problems in barns and houses due to millipedes, other insects, which were also seen in the crop fields. Aphids have been affecting hay, alfalfa crops in Wayne county. Whereas developing wheat diseases were discovered in other counties, due to too much rain and limited evaporation. This is causing a decrease in the quality, quantity of wheat. Oats are just beginning to ripen. Unlike other counties, smitten by rain, Clinton county is receiving unusually warmer, drier weather. Having only received less than 1.5 inches of rain in the last month, irrigation practices were executed on newly planted strawberry and blueberry fields. Clark, Logan counties have also experienced excellent crop and fruit conditions, especially in apples.

OKLAHOMA: Days suitable for fieldwork 4.8 Topsoil 12% very short, 31% short, 48% adequate, 9% surplus. Subsoil moisture 24% very short, 31% short, 41% adequate, 4% surplus. Oats 77% harvested, 50% last week, 38% 2003, 52% avg.; 27% plowed, n/a last week, n/a last year, 13% avg. Rye 77% harvested, 73% last week, n/a 2003, n/a avg; 27% plowed, n/a last week, n/a 2003, n/a avg. Corn 1% poor, 15% fair, 77% good, 7% excellent; 40% silking, 18% last week, 19% last year, 16% avg.; 15% dough, n/a last week, n/a 2003, 1% avg. Sorghum 77% emerged, 52% last week, 43% 2003, 52% avg. Soybeans 1% poor, 37% fair, 55% good, 7% excellent; 85% planted, 81% last week, 74% 2003, 76% avg.; 75% emerged, 73% last week, 69% 2003,, 68% avg.; 5% blooming, n/a last week, n/a 2003, 3% avg. Peanuts 2% setting pods. Cotton 96% emerged, 92% last week, 94% 2003, 90% avg. Alfalfa Hay 2% very poor, 10% poor, 33% fair, 43% good, 12% excellent; 87% 2nd cutting, 77% last week, 68% 2003, 62% avg.; 9% 3rd cutting. Other Hay 6% very poor, 8% poor, 37% fair, 40% good, 9% excellent; 75% 1st cutting, 72% last week, 66% 2003, 70% avg.; 6% 2nd cutting. Watermelons 94% running, 85% last week, 94% 2003, 84% avg.; 69% setting fruit, 48% last week, 57% 2003, 47% avg.; 1% harvested. Livestock 3% poor, 27% fair, 54% good, 16% excellent; Pasture & Range 7% very poor, 14% poor, 31% fair, 36% good, 12% excellent. Livestock conditions were consistent at 16% excellent, 54% good, 27% fair, 3% poor. Livestock insect activity was mostly moderate to light. The price for feeder steers and heifers remained stable this week with only small changes. Feeder steers less than 800 pounds went up six cents this week averaging $114.94 per cwt. The price for feeder heifers less than 800 pounds was $109.24 cwt., a decrease of twenty-six cents from last week.

OREGON: Days suitable for fieldwork: 6.8. Topsoil 3% very short, 36% short, 60% adequate, 1% surplus. Subsoil 7% very short, 38% short, 54% adequate, 1% surplus. Barley 55% headed, 42% previous week, 57% 2003, condition 1% poor, 29% fair, 60% good, 10% excellent. Spring wheat 80% headed, 72% previous week. Winter wheat condition 1% very poor, 9% poor, 32% fair, 49% good, 9% excellent. Range, Pasture 8% poor, 30% fair, 51% good, 11% excellent. Activities: Past week saw return to hot conditions in western state, dry, sometimes windy conditions across entire State, causing concern for fire safety. Precipitation almost non-existent across the State, forcing some irrigation systems to start running again. However, Wallowa County did have a thundershower or two near week's end. Overall, crop conditions remained good or better, but warm, dry weather may show some effects in upcoming weeks. High temperatures in the nineties in the Willamette Valley, upper nineties in southwestern areas of Oregon. Tornado activity noted in Washington County. Medford recorded 150 growing

degree days (base 50), highest for last week. Mostly dry week allowed producers to get haying season in full swing. With much of first cutting of alfalfa done, many producers started putting up their grass hay. Warmer, drier weather pushed small grain crop maturity in eastern state. Statewide, as of June 20, 80 percent of spring wheat, 55% of barley headed or beyond. Rust in grass, small grain crops reported in central, west-central state. In Marion County, fungicide applied to most serious stripe rust infections. Sherman County producers busy fertilizing, controlling weeds in summer fallowed fields. Vegetable growers welcomed the warm temperatures throughout the State. Vegetables growing rapidly, last planting of processing crops completed in Clackamas County. Ground in good working condition for cultivating, weeding of crops. Due to hot weather, tomatoes, sweet corn, melons growing well. Local snap peas available at markets. Washington County reported potatoes beginning to bloom. Bing cherry harvest progressed last week in Wasco County; some cullage reported on early varieties from recent storms. Cherry harvest began in lower Hood River Valley and the Willamette Valley, while southern state cherries continued to ripen. Strawberry harvest started to decline with about two weeks left in the southern Willamette Valley. Raspberries picked; Marionberries, blackberries showing color. Hazelnuts filling out. Southern state peaches, plums sizing out. Southern coast cranberry bloom, fruit set continued. Nurseries in their summer maintenance mode, keeping busy with watering, feeding & other plant maintenance. Easter lily growers irrigating where needed. Greenhouses starting summer clean up, getting out stock still being planted. Warmer conditions across the State last week began to dry down pastures in some areas. Dryland pastures in eastern state started showing effects of warmer weather temperatures, irrigation in full swing. Rangeland conditions in eastern state remained mostly as fair to good. Mountain ranges holding up very well with good grazing conditions; some lower elevation ranges very dry. Livestock in good condition throughout the State.

PENNSYLVANIA: Days suitable for field work 3.0. Soil 2% short, 50% adequate, 48% surplus. Corn 96% emerged, 72% 2003, 90% avg.; height 26 inch, 8 inch 2003, 14 inch avg.; crop condition 1% very poor, 2% poor, 14% fair, 39% good, 44% excellent. Barley 96% turning yellow, 77% 2003, 89% avg.; 78% ripe, 6% 2003, 54% avg.; 21% harvested, 0% 2003, 24% avg. Winter wheat 77% turning yellow, 22% 2003, 48% avg., condition 1% very poor, 19% poor, 37% fair, 36% good, 7% excellent. Oats 43% heading, 28% 2003, 51% avg.; condition 5% very poor, 15% poor, 29% fair, 44% good, 7% excellent. Soybeans 90% planted, 62% 2003, 85% avg.; 70% emerged, 49% 2003, 77% avg.; condition 2% poor, 19% fair, 63% good, 16% excellent. Tobacco 90% transplanted, 42% 2003, 84% avg. Alfalfa 1st cutting 77% complete, 55% 2003, 77% avg.; 2nd cutting 6% complete, 1% 2003, 12% avg.; condition 1% very poor, 6% poor, 23% fair, 51% good, 19% excellent. Timothy clover 1st cutting 44% complete, 21% 2003, 47% avg., condition 1% very poor, 11% poor, 22% fair, 55% good, 11% excellent. Peach crop condition 1% poor, 5% fair, 64% good, 30% excellent. Apple crop condition 30% fair, 61% good, 9% excellent. Quality of hay made 19% very poor, 20% poor, 36% fair, 22% good, 3% excellent. Pasture feeds 1% very poor, 2% poor, 17% fair, 64% good, 20% excellent. Activities: Cutting 2nd hay crop, spreading fertilizer, spreading manure, applying herbicides, pesticides, harvesting barley, repairing fences and machinery.

SOUTH CAROLINA: Days suitable for field work 5.5. Soil 5% very short, 34% short, 58% adequate, 3% surplus. Corn 70% silked, 52% 2003, 64% avg.; 9% doughed, 7% 2003, 15% avg.; 6% very poor, 16% poor, 35% fair, 35% good, 8% excellent. Peanuts 19% pegged, 9% 2003, 12% avg.; 2% poor, 52% fair, 46% good. Sorghum 95% planted, 87% 2003, 89% avg.; 45% headed, 39% 2003, 38% avg., 5% turned color, 0% 2003, 4% avg.; 20% fair, 80% good. Cotton 100% planted, 98% 2003, 99% avg.; 35% squared, 12% 2003, 25% avg.; 1% setting bolls, n/a 2003, 5% poor, 31% fair, 62% good 2% excellent. Winter wheat 100% turned color, 100% 2003, 100% avg.; 98% ripe, 97% 2003, 99% avg.; 88% harvested, 66% 2003, 86% avg.; 1% very poor, 5% poor, 44% fair, 48% good, 2% excellent. Sweetpotatoes 85% planted, 89% 2003, 88% avg; 100% good. Barley 99% turned color, 99% 2003, 100% avg.; 95% riper, 87% 2003, 96% avg.; 75% harvested, 51% 2003, 79% avg.; 24% fair, 76% good. Pastures 5% very poor, 18% poor, 46% fair, 30% good, 1% excellent. Rye 99% turned color, 100% 2003, 100% avg.; 98% ripe, 95% 2003, 98% avg.; 78% harvested, 60% 2003, 83% avg.; 17% poor, 77% fair, 6% good. Oats 95% ripe, 92% 2003, 97% avg.; 86% harvested, 62% 2003, 84% avg.; 2% very poor, 24% poor, 50% fair, 24% good. Soybeans 93% planted, 77% 2003, 82% avg.; 80% emerged, 60% 2003, 67% avg.; 1% very poor, 9% poor, 39% fair, 49% good, 2% excellent. Tobacco 17% topped, 17% 2003, 22% avg.; 7% poor, 24% fair, 54% good, 15% excellent. Grain Hay 98% harvested, 96% 2003, 99% avg.; 11% very poor, 24% poor, 34% fair, 30% good, 1% excellent. Peaches 20% harvested, 20% 2003, 24% avg.; 2% very poor, 2% poor, 11% fair, 37% good, 48% excellent. Snapbeans 64% harvested, 60% 2003, 63% avg.; 4% fair, 95% good, 1% excellent. Cucumbers 84% harvested, 75% 2003, 77% avg.; 9% fair, 63% good, 28% excellent. Watermelons; 11% harvested, 6% 2003, 17% avg.; 4% poor, 53% fair, 37% good, 6% excellent. Tomatoes 29% harvested, 41% 2003, 35% avg.; 24% fair, 24% good, 52% excellent. Cantaloups 99% planted, 100% 2003, 100% avg.; 21% harvested, 26% 2003, 26% avg.; 7% poor, 62% fair, 31% good. Livestock 4% poor, 30% fair, 64% good, 2% excellent.

SOUTH DAKOTA: Days suitable for fieldwork 4.2. Topsoil 6% very short, 10% short, 74% adequate, 10% surplus. Subsoil 16% very short, 23% short, 54% adequate, 7% surplus. Feed supplies 14% very short, 18% short, 64% adequate, 4% surplus. Stock water supplies 23% very short, 24% short, 50% adequate, 3% surplus. Winter Wheat turning color 12%, 17% 2003, 12% avg. Barley boot 82%, 77% 2003, 68% avg. 1% 2003. Oats boot 86%, 84% 2003, 71% avg.; % avg. Spring Wheat boot 92%, 85% 2003, 75% avg.; Wheat turning color 0%, 1% 2003. Average corn height average corn height 12", 11" 2003, 12" avg. Corn cultivated or sprayed once 76%, 72% 2003, 55% avg. Corn cultivated or sprayed twice 15%, 19% 2003, NA% avg. Sorghum emerged 64%, NA% 2003, NA% avg. Sunflower planted 82%, 89% 2003, 89% avg. Cattle condition 3% poor, 17% fair, 67% good, 13% excellent. Sheep condition 14% poor, 11% fair, 66% good, 9% excellent. Range, Pasture 10% very poor, 19% poor, 30% fair, 33% good, 8% excellent. Alfalfa hay 1st cutting harvested 50%, 69% 2003, 61% avg. Other hay harvested 15%, 27% 2003, 20% avg. Persistent light to moderate rainfall maintained last week's predominately adequate soil moisture ratings, but continued to hamper the first cutting alfalfa harvest. Producers' efforts are focused on weed control, disease, insect scouting, and livestock maintenance, in addition to haying.

TENNESSEE: Days suitable for fieldwork 4.0. Topsoil 6% short, 76% adequate, 18% surplus. Subsoil 7% short 82% adequate, 11% surplus. Wheat 99% ripe, 94% 2003, 97% avg.; 54% harvested, 21 2003, 60% avg. Tobacco 89% transplanted, 84% 2003, 92% avg.;3% poor, 22% fair, 60% good, 14% excellent. Alfalfa hay 11% second cutting, 8% 2003, 11% avg.;1% poor, 18% fair, 68% good, 13% excellent. Other hay 91% first cutting, 86% 2003, 94% avg.;5% poor, 23% fair, 60% good, 12% excellent. Pastures 3% poor, 19% fair, 61% good, 17% excellent. Farmers experienced scattered showers, thunderstorms during much of last week. Despite the rainfall, wheat harvest advanced 29 percentage points ahead of the previous week and is currently about a week ahead of last year. Activities: Transplanting tobacco, spraying for insects, weeds. Temperatures averaged above normal across the State, while rainfall averaged above normal in East State but below normal across the remainder of the state.

TEXAS: Agricultural Summary: The last week of Spring brought severe storms for some, while others were drying out from heavy rain the previous week. The High Plains experienced widely scattered thunderstorms packing high winds, hail. Rainfall totals in locations hit by storms were 2 to 5 inches for the week. Areas that missed the heavy rain generally received a trace to ½ inch. North Central State saw a few showers move along the Red River with amounts totaling up to 2 inches of rain. East State, the Upper Coast experienced heavy rain associated with a tropical disturbance off the coast of Louisiana. Precipitation amounts neared 4 to 5 inches in some locations while 2 inches of rain were typical across those regions. Isolated locations of the Trans Pecos saw a few heavy showers with 2 to 3 inches of rain. Many regions in the western half of the State recorded their highest temperatures this year as triple-digit heat made an appearance in the Trans Pecos, Edwards Plateau. Soil moisture remained favorable in most areas, however some areas of the High Plains were still in need of more rain to fill the soil profile. Central, eastern areas needed dry, open weather after a couple weeks of excess precipitation. Planting of remaining summer crops was expected to wind down shortly, small grain harvest was progressing swiftly. An increase of insect pressure was noticed through most regions.Small Grains: Wheat harvest continued at a fast pace on the Plains. Some combining was delayed due to wet conditions. A few fields on the Low Rolling Plains through North Central State reported head sprouting due to excessive rain the past couple weeks. Some of those fields could be unharvestable. Yield reports varied greatly county by county; some reported the best in years, while others reported below average. Wheat condition 59% normal, 49% 2003. Corn: Corn was in excellent condition statewide. Crop progress was fast, furious on the Plains as earlier planted fields were beginning to tassel. Irrigation was heavy in dry areas. Mites, grasshoppers were prevalent in fields in the region. Corn on the Blacklands benefitted from the increased soil moisture as the crop has tasseled, many fields were at dough stage. Another rain would be helpful to Coastal Bend producers to finish off their crop before harvest. Corn condition 90% normal, 57% 2003. Cotton: Plains cotton continued to benefit from warm, open weather, the occasional shower. Fields a little further south near the Permian Basin were beginning to suffer from drought like conditions as some plants were not expected to emerge without rain. Irrigation began where available. Thrips were a problem in some fields. A majority of the crop in the region had begun to square. Growers in the Blacklands saw rapid growth as plants were nearing boll set. Herbicide, pesticide applications were heavy, some producers

were applying growth regulators. Cotton on the Coastal Bend could use a little rain in the drier locations. Cotton condition 71% normal, 54% 2003.Sorghum: Planting of sorghum continued on the Plains as insurance deadlines drew closer. Some dryland fields will not planted until rain occurs. Fields in the Blacklands and Central Texas were responding well to the increased moisture the past couple of weeks. Coastal Bend sorghum was maturing rapidly, combining should begin within the next few weeks. Producers were preparing for harvest in the Rio Grande Valley. Midge was prevalent in many regions throughout the state, growers were spraying accordingly. Sorghum condition 79% normal, 67% 2003. Peanuts: Fields on the Plains were reported as generally favorable, but shorter stands had thrip problems. Planting neared completion in the Trans Pecos, South State with some fields emerging. Peanut condition 83% normal, 83% 2003.Rice condition 87% normal, 92 2003. Commercial Vegetables, Fruit, Pecans.Pecans: Orchards were in generally favorable condition. Watering continued in drier areas. Some hail damage was reported to pecan trees on the Trans Pecos. In the San Antonio-Winter Garden, watermelon, cantaloupe, and potato harvest was ongoing. On the High Plains, pumpkins have been planted, were developing well. On the Trans-Pecos, chiles were blooming. Melons were progressing, potato harvest was ongoing. Grapes were anticipated to do very well as harvest was set for next month.In East State, watermelon harvest was in full swing. Fungicides were being applied where necessary. Range, Livestock: Range, pastures remained in good condition as supplemental feeding of cattle was necessary in only the most driest locations. Increased moisture in many areas should spur decent growth of forage going into the summer months. Cattlemen had no complaints about herd condition. Sheep shearing, goat, lamb marking were active. White shrimp season on the Trans Pecos was progressing.

UTAH: Days suitable for field work 6. Subsoil 8% very short, 37% short, 55% adequate, 0% surplus. Irrigation Water Supplies 11% very short, 36% short, 53% adequate, 0% surplus. Winter Wheat 94% headed, 96% 2003, 82% avg.; condition 1% very poor, 17% poor, 26% fair, 44% good, 12% excellent. Spring Wheat 53% headed, 72% 2003, 58% avg.; 0% very poor, 9% poor, 29% fair, 45% good, 17% excellent. Barley 59% headed, 79% 2003, 64% avg.; condition 0% very poor, 3% poor, 24% fair, 57% good, 16% excellent. Oats 39% headed, 56% 2003, 38% avg. Oats harvested for Hay or Silage 14%, 13% 2003, 5% avg. Corn 100% emerged, 99% 2003, 99% avg.; condition 0% very poor, 1% poor, 16% fair, 73% good, 10% excellent. Corn height 14 inches, 14 inches 2003, 13 inches avg. Alfalfa Hay 1st Cutting 87%, 77% 2003, 81% avg.; 2nd Cutting 1%, 1% 2003, 3% avg. Other Hay Cut 48%, 43% 2003, 35% avg. Dry beans 62% planted, 92% 2003, 92% avg. Cattle, calves moved To Summer Range 83%, 80% 2003, 91% avg. Cattle, calves condition 0% very poor, 2% poor, 18% fair, 70% good, 10% excellent. Sheep, lambs moved To Summer Range 82%, 78% 2003, 90% avg. Sheep condition 0% very poor, 1% poor, 18% fair, 70% good, 11% excellent. Stock Water Supplies 6% very short, 29% short, 64% adequate, 1% surplus. Apricots harvested 11%. Sweet Cherries 28% harvested. Tart Cherries 1% harvested, 0% 2003, 0% avg. Although the state received timely rain, it wasn't enough to counteract the problem of scarce irrigation supplies in most parts of the state. Hail dropped by the storm reportedly caused minimal damage to crops. First cutting of alfalfa was well underway across the state. Apricot harvest began, as did the sweet cherry harvest. Due to poor pollination in April, concern was expressed for the sweet cherry crop. Farmers across the state were concerned about grasshopper infestations as well as depleting irrigation supplies. Although rains have helped some grain, corn crops in Box ElderCounty, the Cedar Fort area, parts of Duchesne county reported that theyexpect to be completely out of water for irrigation by July 1st. Sheep, Livestock were in good condition. Cattle, sheep continued tobe moved to summer pasture, but movement continues to be about a week behind the 5 year average due to recent moisture.

VIRGINIA: Days suitable for fieldwork 4.2. Topsoil 1% very short, 4% short, 70% adequate, 25% surplus. Subsoil 9% short, 73% adequate, 18% surplus. Scattered rain showers, hotter than normal temperatures persisted throughout the week. Most parts of the State experienced one inch of rain, save for some remote areas that experienced flash flood with rains exceeding 6 inches. The southeastern region of the State did not receive much rain, if any, from these storms. The quality of hay has decreased due to a delayed harvest caused by the rain. Winter wheat, barley quality have also been threatened by the excessive rains. However, corn, soybeans have flourished in the current weather conditions. Activities: Tending vegetable crops, cleaning up behind flash floods, and spraying fields for grasshoppers.

WASHINGTON: Days suitable for fieldwork 6.9. Topsoil 15% short, 85% adequate. Subsoil 2% very short, 22% short, 75% adequate, 1% surplus. Irrigation water supply 8% short, 92% adequate. The highest temperature in the state was 94° in Hanford. The lowest temperature in the state was 30° in Stampede Pass. Winter wheat condition 2% very poor, 5% poor, 23% fair, 61% good, 9% excellent with 92% headed. Spring wheat condition 3% poor, 29% fair, 62% good, 6% excellent; 60% headed. Barley conditions 2% poor, 31% fair, 55% good, 12% excellent; 50% headed. Spring wheat, barley headed out rapidly due an increase in temperature. Heavy thunderstorms in areas of our largest wheat producing county caused mudslides, downed some winter wheat, barley. Potato conditions 4% fair, 93% good, 3% excellent; 100% emerged. Corn conditions 1% fair, 99% good; 100% planted, 92% emerged. Dry edible bean conditions 1% fair, 98% good, 1% excellent; 99% planted. There were reports of wireworm in field corn, potato crops. Christmas tree producers experienced minor heat damage on new growths of Noble firs. Alfalfa Hay first cutting was 90% complete, 2nd cutting was 6% complete. Hay, other roughage 2% very short, 4% short, 94% adequate. Range, pasture feeds 12% very poor, 13% poor, 27% fair, 47% good, 1% excellent. Nearly ideal harvest conditions allowed hay producers to get out, into fields. Most producers reported average to good yields as long as hay was cut after the early June rains. Some cattle producers finished their breeding season. Green, sugar snap pea harvests continued, along with strawberry, cherry harvests. Rain damage to cherry harvest continued to be a problem with some producers reporting culls averaging 20-50 percent. Some Blueberry growers reported early varieties were showing color, that they expected harvest to be two weeks ahead of schedule. Bush bean, sweet corn plantings were other ongoing activities.

WEST VIRGINIA: Days suitable for field work 3.0. Topsoil 49% adequate, 51% surplus, 2003 16% adequate, 84% surplus. Hay, roughage supplies 3% short, 87% adequate, 10% surplus, 2003 5% very short, 15% short, 80% adequate. Feed grain supplies 1% short, 99% adequate, 2003 5% very short, 9% short, 86% adequate. Corn conditions 2% very poor, 3% poor, 14% fair, 69% good, 12% excellent. Oats conditions 1% poor, 11% fair, 81% good, 7% excellent; 59% headed, 20% 2003, 36% 5-yr avg. Soybeans conditions 2% poor, 2% fair, 78% good, 18% excellent; 96% planted, 55% 2003, 88% 5-yr. avg.; 93% emerged, 35% 2003. Tobacco conditions 7% poor, 16% fair, 77% good; 82% beds transplanted, 50% 2003, 80% 5-yr avg. Winter wheat conditions 27% fair, 72% good, 1% excellent. Hay conditions 1% very poor, 7% poor, 36% fair, 50% good, 6% excellent. First cutting was 38% complete, 18% in 2003, 56% 5 yr-avg. Apples 13% fair, 82% good and 5% excellent. Peaches 9% fair, 87% good, 4% excellent. Cattle, calves 9% fair, 79% good, 12% excellent. Sheep, lambs 5% fair, 86% good, 9% excellent. Activities: Hay making, were limited due to extremely wet conditions.

WISCONSIN: Days suitable for fieldwork 3.6. Last weeks sunny weather dried-up rain-soaked fields, improved crop conditions. Roundup-ready corn, soybeans are being sprayed to kill weeds. Hay is being cut, in some areas looks good, but overall, the quality has suffered due to the excessive rain. Second crop hay is growing back fast. In some areas, first, second crop hay are being made side by side. Crops need a couple weeks of dry weather to catch up. Precipitation last week ranged from trace amounts to almost 2 inches. Average temperatures for this past week were 1 to 2° below normal. Temperatures ranged from the 40's to the mid-80's.

WYOMING: Days suitable for field work 5.4. Topsoil 14% very short, 39% short, 47% adequate. Barley 69% boot, 70% 2003, 64% 5-yr avg.; 51% headed, 50% 2003, 37% 5-yr avg.; 6% turning color, 1% 2003, 1% 5-yr avg.; condition 7% very poor, 7% poor, 19% fair, 67% good. Oats 49% boot, 32% 2003, 31% 5-yr avg.; 28% headed, 17% 2003, 9% 5-yr avg.; 12% turning color, 1% 2003, condition 11% very poor, 20% poor, 32% fair, 36% good, 1% excellent. Spring wheat 66% boot, 31% 2003, 46% 5-yr avg.; 44% headed, 9% 2003, 12% 5-yr avg. condition 40% very poor, 29% poor, 18% fair, 13% good. Winter wheat 97% headed, 90% 2003, 90% 5-yr avg.; 38% turning color, 9% 2003, 18% 5-yr avg.; condition 10% very poor, 37% poor, 43% fair, 10% good. Corn average height 11 inches, 2003 12 inches, 5-yr average 11 inches, condition 1% very poor, 14% poor, 45% fair, 38% good, 2% excellent. Dry beans 91% emerged, 85% 2003, 82% 5-yr avg.; condition 2% very poor, 3% poor, 27% fair, 68% good. Condition of sugarbeets 3% very poor, 7% poor, 27% fair, 61% good, 2% excellent. Alfalfa 1st cutting 29%, 34% 2003, 26% 5-yr avg. Other hay 7% harvested, 8% 2003, 6% 5-yr avg. Irrigation water supplies 25% very short, 35% short, 40% adequate. Cattle moved to summer ranges 84%. Sheep moved to summer ranges 80%. Range, pasture feed 32% very poor, 29% poor, 26% fair, 13% good. Temperatures averaged mostly below normal. Temperatures ranged from 8.4° below normal in Worland to 2.7° above normal in Jackson. The highest temperature was 92° in Torrington, Wheatland, while the lowest temperature was 32° in Afton. Almost all stations reported precipitation with most stations in the North receiving below normal amounts and most in the South receiving above normal amounts. The most precipitation fell in Laramie with 1.26 inches, Cheyenne with 1.14 inches, and Big Piney with 1.01 inches.

International Weather and Crop Summary

June 13 - 19, 2004

International Weather and Crop Highlights and Summaries provided by USDA/WAOB

HIGHLIGHTS

EUROPE: Dryness started to stress reproductive to filling winter crops in England and France, while widespread rain benefited winter and summer crops in central and eastern Europe.

FSU-WESTERN: The 5th consecutive week of below-normal temperatures slowed crop development across the region. Showery weather accompanied the cool weather from Belarus eastward across the Central and Volga Regions in Russia, benefiting winter grains advancing through reproduction and spring grains in the vegetative stage.

FSU-NEW LANDS: Scattered showers fell across spring grain areas in Kazakstan and Russia, bringing only temporary relief from a drying trend that began in early May.

MIDDLE EAST: Light rain benefited filling winter grains in central Turkey, while warm, dry weather favored winter grain maturation and early harvesting in western Iran.

EASTERN ASIA: Favorable showers fell in Manchuria, benefiting summer crops, while Typhoon Dianmu approached Japan.

SOUTHEAST ASIA: Heavy rainfall maintained good moisture levels for crops throughout Indochina and the Philippines.

SOUTH ASIA: Unseasonably heavy rainfall improved summer crop prospects but resulted in some flooding.

AUSTRALIA: Showers in southeastern Australia caused minor disruptions in fieldwork, but the boost in soil moisture encouraged additional winter grain planting and helped early crop development.

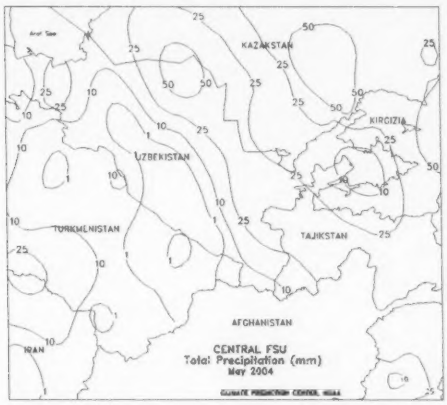
CANADA: On the Prairies, cool, showery weather slowed final planting efforts.

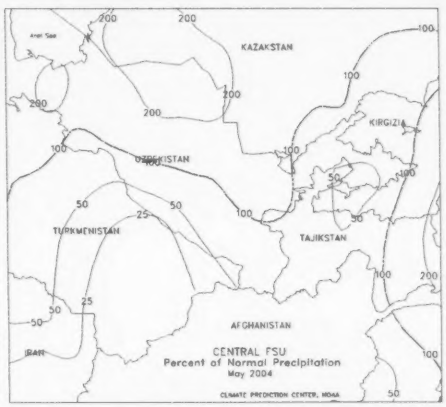
MEXICO: Widespread showers continued to benefit germinating to vegetative corn across the main corn belt.

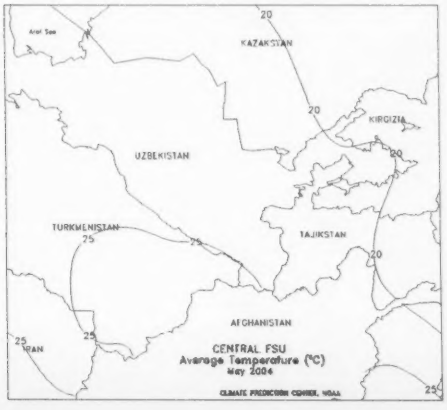
BRAZIL: Conditions favored coffee harvesting.

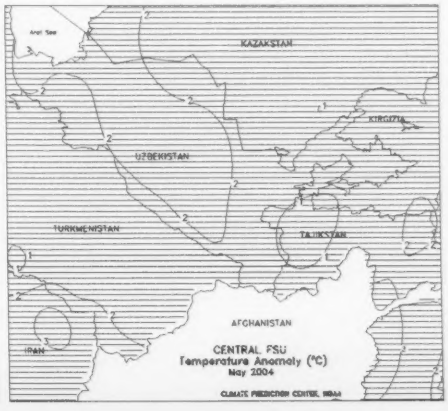
ARGENTINA: Warmth and dryness promoted seasonal fieldwork.

NORTHWESTERN AFRICA: Across Tunisia, unseasonably heavy rain slowed winter grain harvesting, while dry weather favored fieldwork in Morocco and Algeria.



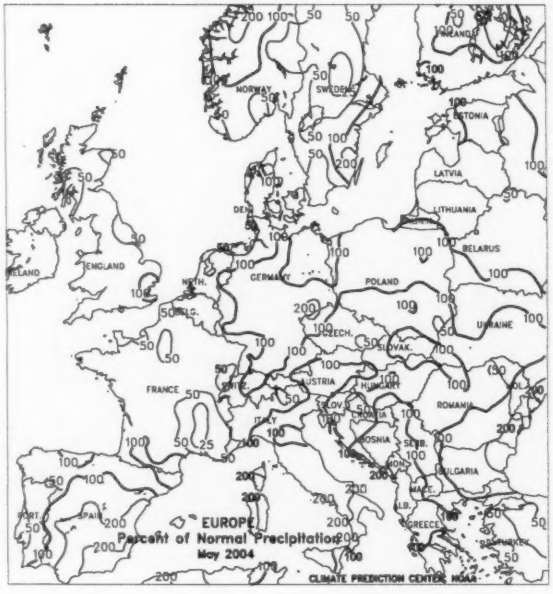


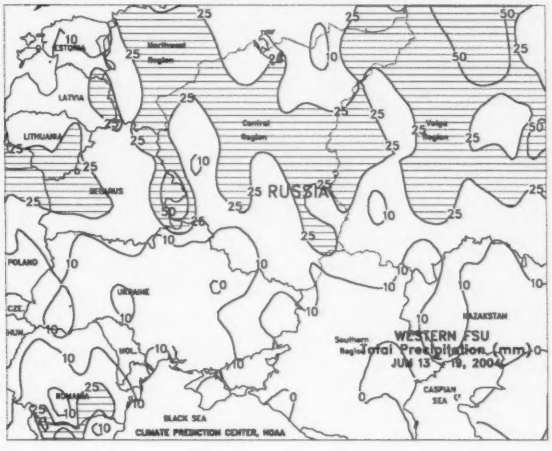




EUROPE

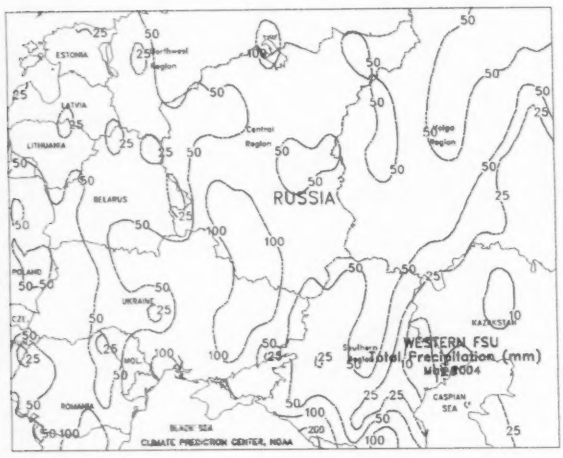
Across England and most of France, 5 weeks of mostly dry weather has started to stress reproductive to filling winter grains and vegetative summer crops. The warm, dry weather increased the use of supplemental irrigation. Temperatures across these regions ranged from 1 to 3 degrees C above normal, with maximum temperatures in the upper 20s C. Across the central and eastern portions of Europe (from the Low Countries and Germany to Poland and into southeastern Europe),widespread, light to sometimes moderate rain (10-40 mm) favored winter crops and vegetative summer crops. Heavier rain (25-50 mm) fell across the northern half of Poland, Slovenia, Croatia, southern Romania, and Bulgaria. Across Italy's Po Valley, scattered rain (5-25 mm) eased short-term dryness, but more rain is still needed for rainfed summer crops. In southern Italy, warm, dry weather favored maturing durum wheat. Winter grains were filling to maturing across most of southern Europe and reproductive to filling across the north. Across the Iberian Peninsula, seasonably dry weather favored wheat harvesting in southern Spain and filling wheat in north-central Spain. Temperatures averaged 2 to 6 degrees C above normal across all of western and central Europe and near to slightly above normal in the east. Temperatures averaged near to slightly below normal across most of central and eastern Europe and 1 to 4 degrees C above normal across Portugal. During May, near- to above-normal May rainfall across central and eastern Europe favored vegetative to reproductive winter grains and vegetative summer crops. Across the lower Danube River Valley, above-normal May and early-June rainfall alleviated short-term dryness. Below-normal rainfall reduced soil moisture supplies for winter and summer crops in England and France. In southern Spain, unseasonably wet weather slowed winter grain harvesting and raised grain quality concerns.

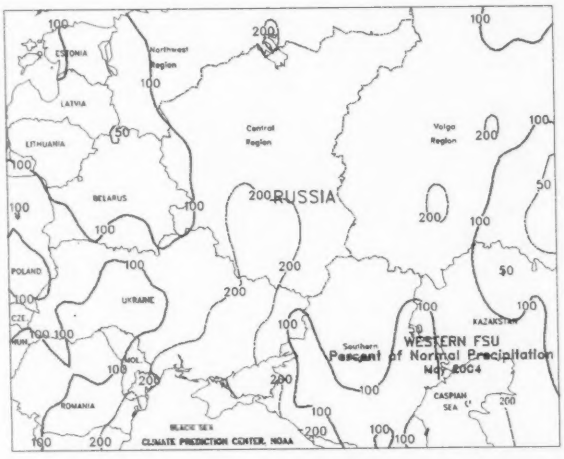




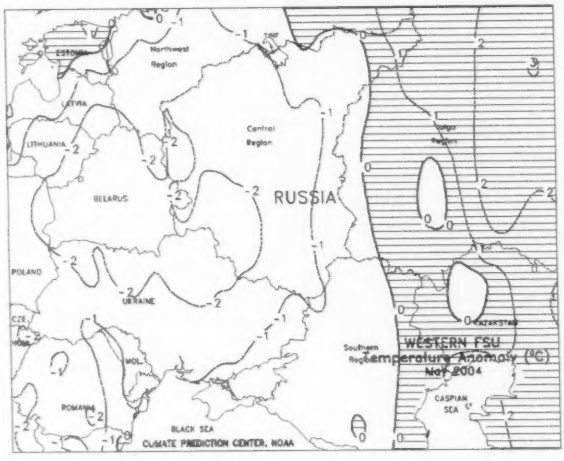
FSU-WESTERN

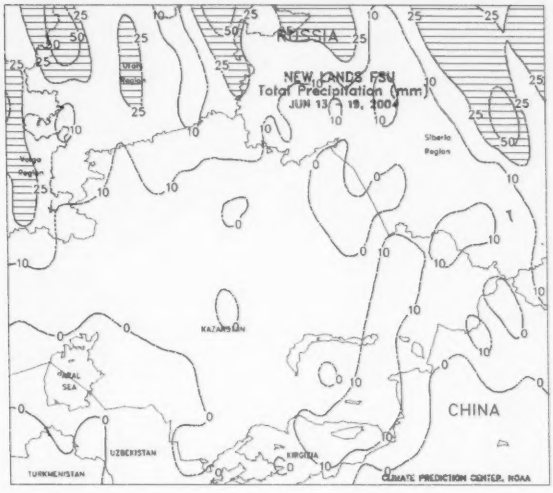
The 5th consecutive week of unseasonably cool weather (weekly temperatures averaging 1 to 5 degrees C below normal) prevailed across the region, slowing crop development. Unseasonably cool, showery weather prevailed from Belarus eastward across the Central and Volga Regions in Russia, benefiting winter grains advancing through reproduction and spring grains in the vegetative stage. Rainfall generally ranged from 10 to 40 mm, with local amounts in excess of 50 mm. Elsewhere, mostly dry weather prevailed across Ukraine and the Southern Region in Russia, where winter wheat was in the filling stage of development and summer crops were in the vegetative stage. Although soil moisture was adequate to meet crop-water demands in most areas, rain was needed in western Ukraine, where dryness has persisted since early June. In May, weather conditions favored winter grain development and spring crop planting. Much-needed rain reversed April's below-normal precipitation in southern and eastern Ukraine, benefiting winter grains and boosting emergence prospects for spring-sown crops. Elsewhere, near- to above-normal precipitation maintained adequate moisture for crops in Russia and the southern half of Belarus. The precipitation was intermittent, with periods of dry weather allowing spring grain and summer crop planting. Below-normal precipitation was observed in northern Belarus and parts of Moldova, causing a reduction in soil moisture. Winter grains entered the heading stage in Ukraine and southern Russia and were progressing through the jointing stage farther north in Belarus and northern Russia. Temperatures averaged 1 to 3 degrees C below normal in most areas, lowering evaporation rates but slowing summer crop emergence. From May 13-18, minimum temperatures on some nights fell at or below freezing (-4 to 0 degrees C) in patchy areas of Belarus and the Central Region. Temperatures did not fall low enough to threaten winter grains.


WESTERN FSU
Total Precipitation (mm)
May 2004
RUSSIA
CLIMATE PREDICTION CENTER, NOAA


WESTERN FSU
Percent of Normal Precipitation
May 2004
RUSSIA
CLIMATE PREDICTION CENTER, NOAA

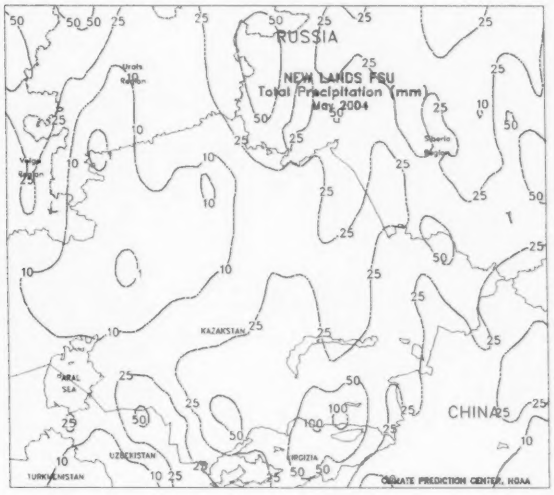
WESTERN FSU
Average Temperature (°C)
May 2004
RUSSIA
CLIMATE PREDICTION CENTER, NOAA

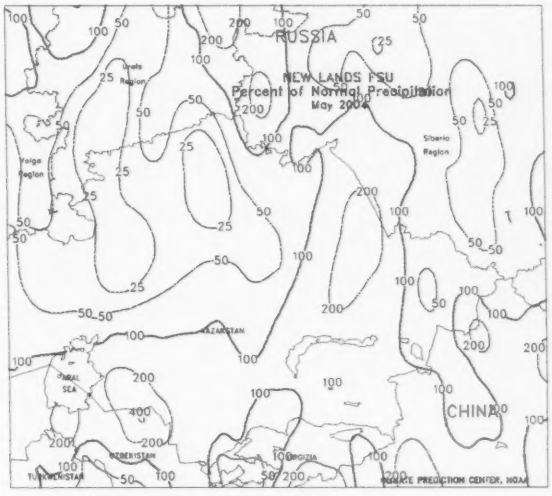

WESTERN FSU
Temperature Anomaly (°C)
May 2004
RUSSIA
CLIMATE PREDICTION CENTER, NOAA

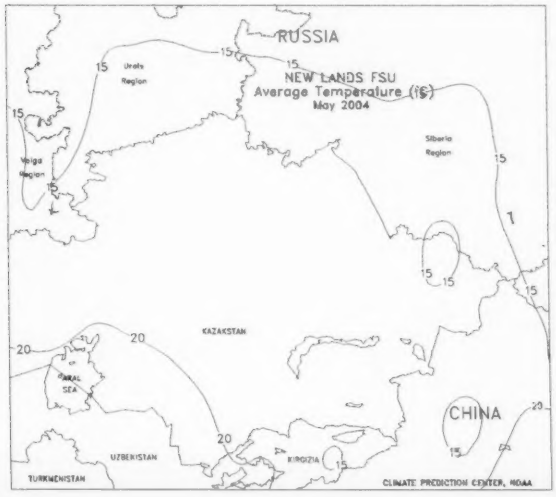


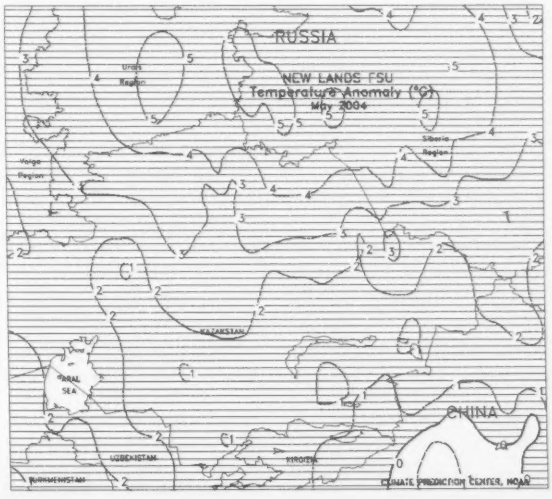
FSU-NEW LANDS

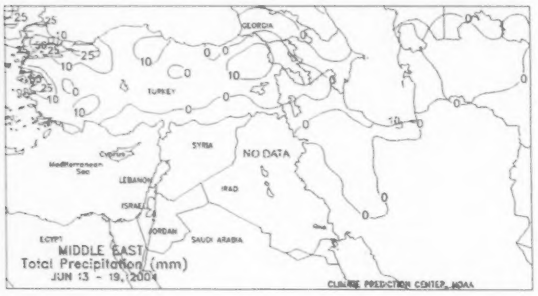
Occasional showers fell from the Urals Region in Russia and extreme northern areas in Kazakstan, eastward into Siberia. Rainfall generally ranged from 10 to 25 mm in the Urals and extreme northern areas in Kazakstan and 3 to 10 mm in most of Siberia. In most areas, the showers brought only temporary relief from a drying trend that began in early May, and timely follow-up rains will be needed during the remainder of the growing season to prevent declines in crop conditions. Weekly temperatures averaged 1 to 3 degrees C below normal in the Urals Region in Russia and adjacent areas in Kazakstan, and 1 to 4 degrees C above normal over the remainder of the region. Extreme maximum temperatures briefly rose into the 30s degrees C in Siberia and northern Kazakstan. In May, below-normal precipitation and unseasonably mild weather prevailed throughout most of Russia (Urals and Siberia Regions) and Kazakstan, helping fieldwork for spring grain (spring wheat, spring barley, and oats) planting. Periodic heat prevailed over most of the region, with the hottest weather in at least the past 25 years in most of Russia and Kazakstan during May 10-20. The hot, dry weather caused rapid drying of topsoils. Monthly temperatures averaged 3 to 7 degrees C above normal in Russia and Kazakstan.





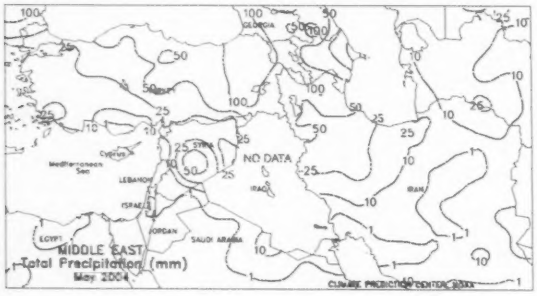


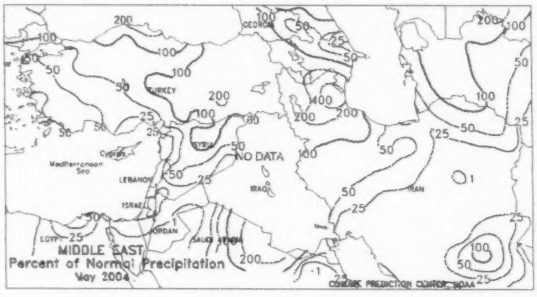


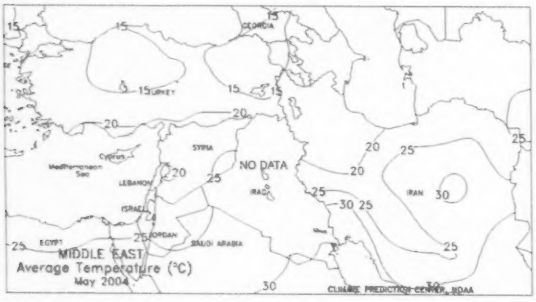


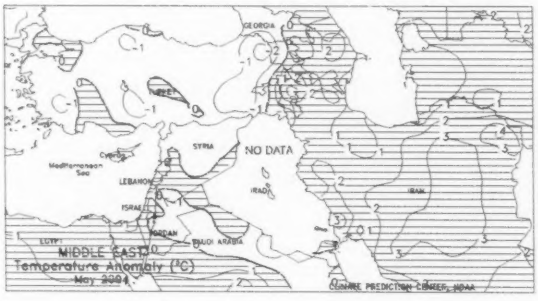
MIDDLE EAST

Across central Turkey, light rain (5-15 mm) favored filling winter grains. Heavier rain (10-30 mm) covered northwestern Turkey, benefiting summer crops. In western Iran, seasonably warm, dry weather favored winter grain maturation and early harvesting. Based on reports from surrounding countries, dry weather prevailed across northern Iraq. Temperatures averaged 1 to 3 degrees C above normal across Turkey and the eastern Mediterranean and near normal across western Iran. During May, in central Turkey and western Iran, near- to above-normal rainfall and seasonable temperatures favored reproductive winter grains. *(Weekly summaries for the Middle East will be discontinued until next year's planting season. Monthly summaries will continue each month.)*



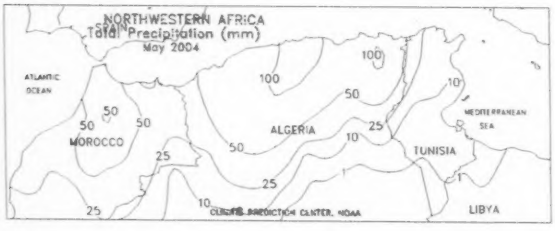


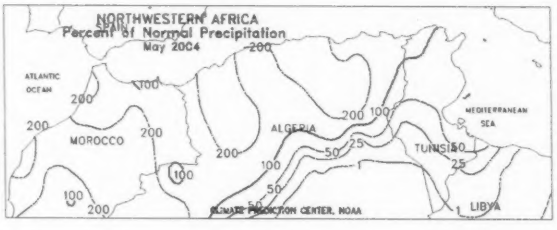


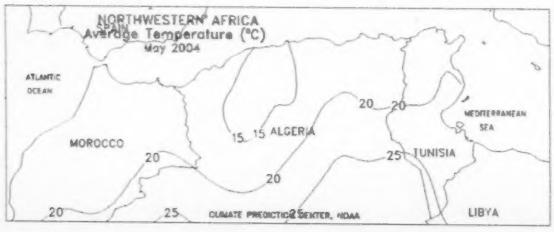


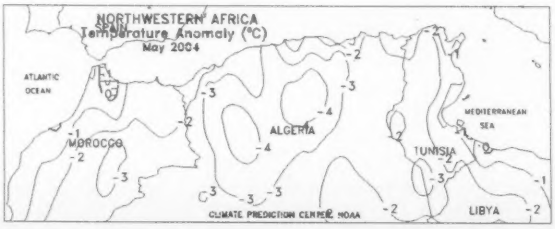
NORTHWESTERN AFRICA

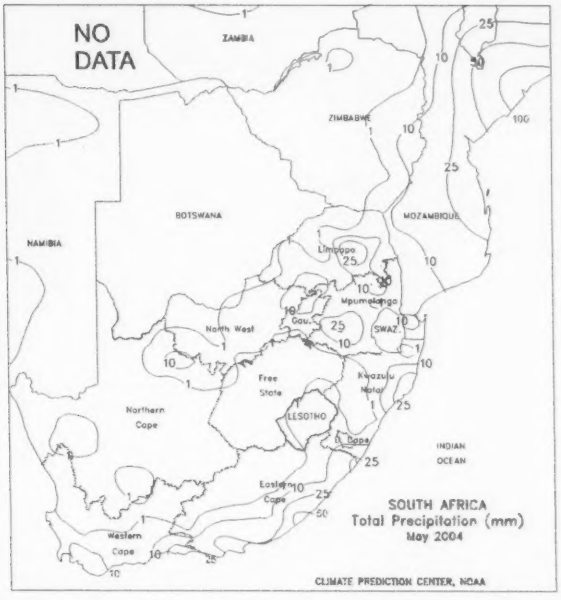
During May, widespread unseasonably wet, cool weather across Morocco and Algeria slowed winter grain maturation and harvesting and raised grain quality concerns. Near- to below-normal May rainfall favored grain maturation in Tunisia.







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ZIMBABWE
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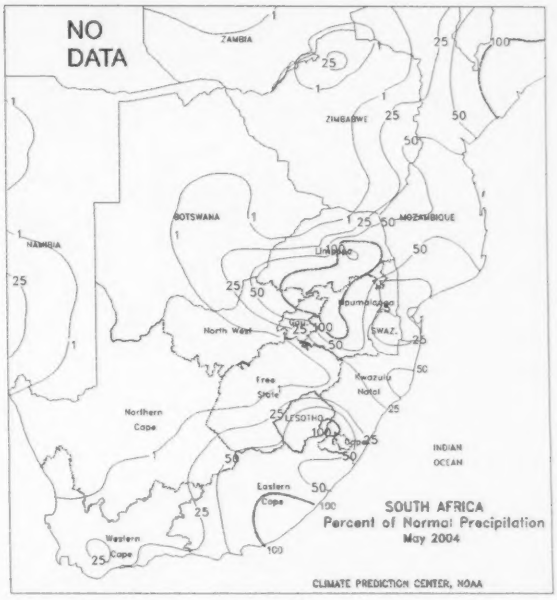
MOZAMBIQUE
NAMIBIA
Limpopo
Mpumalanga
North West
Gau.
SWAZ.
Free State
Kwazulu Natal
LESOTHO
Northern Cape
Eastern Cape
Western Cape
INDIAN OCEAN
SOUTH AFRICA
Total Precipitation (mm)
May 2004
CLIMATE PREDICTION CENTER, NOAA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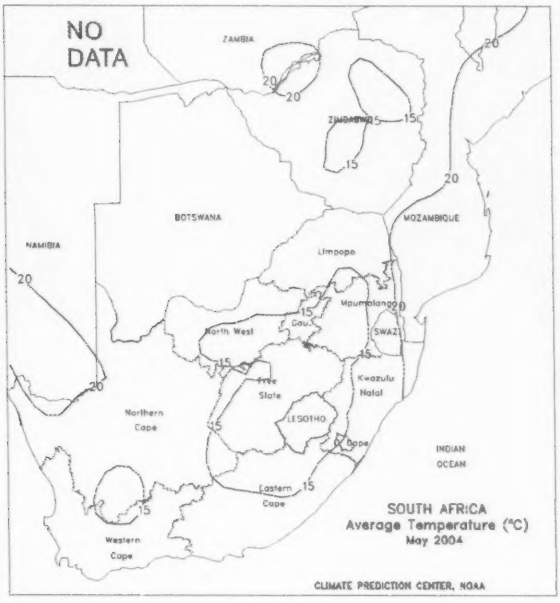
ZIMBABWE
BOTSWANA
MOZAMBIQUE
NAMIBIA
Limpopo
Mpumalanga
North West
Gau.
SWAZ.
Free State
Kwazulu Natal
LESOTHO
Northern Cape
Eastern Cape
Western Cape
INDIAN OCEAN
SOUTH AFRICA
Percent of Normal Precipitation
May 2004
CLIMATE PREDICTION CENTER, NOAA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SWAZ.
Free State
Kwazulu Natal
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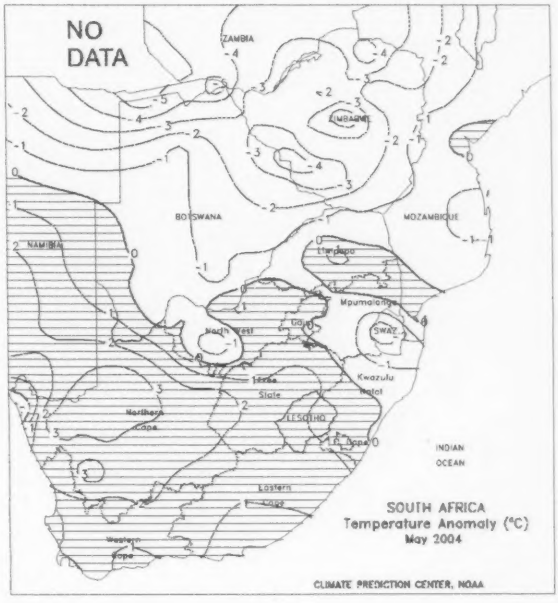
Western Cape
INDIAN OCEAN
SOUTH AFRICA
Average Temperature (°C)
May 2004
CLIMATE PREDICTION CENTER, NOAA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MOZAMBIQUE
NAMIBIA
Limpopo
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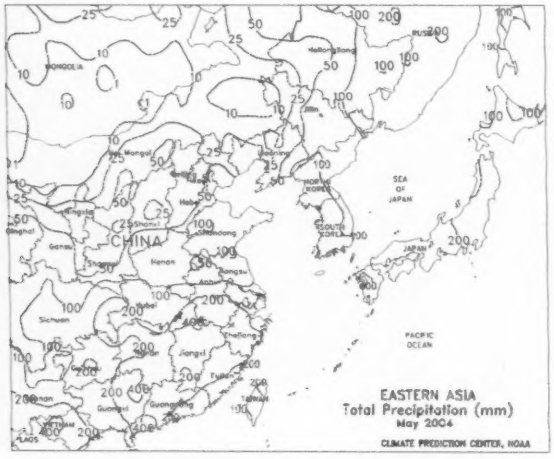
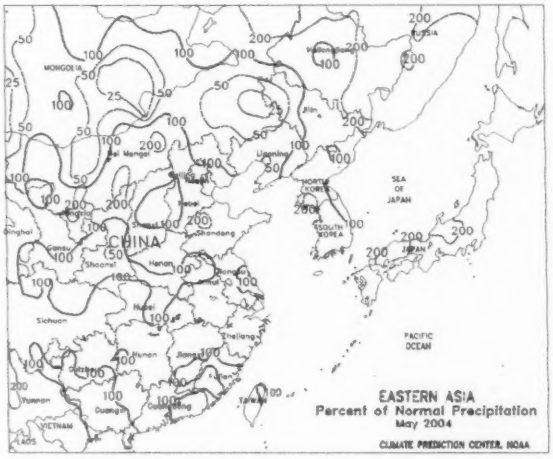
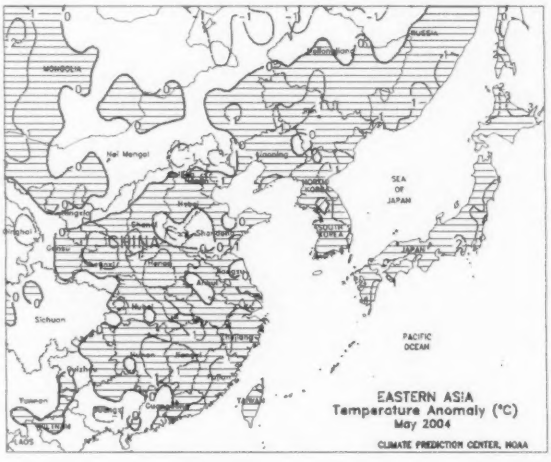
North West
Gau.
SWAZ.
Free State
Kwazulu Natal
LESOTHO
Northern Cape
Eastern Cape
Western Cape
INDIAN OCEAN
SOUTH AFRICA
Temperature Anomaly (°C)
May 2004
CLIMATE PREDICTION CENTER, NOAA

EASTERN ASIA

Highly favorable showers (10-25 mm or more) fell throughout Manchuria, increasing topsoil moisture for corn and soybeans. Temperatures were 1 to 5 degrees C above normal (highs near 35 degrees C), maintaining high moisture demands on vegetative crops. Showers (25-50 mm or more) on the North China Plain increased soil moisture for vegetative to productive summer crops. Winter wheat harvesting was reportedly nearing completion. The heaviest showers (50-200 mm) were south of the Yangtze River, maintaining high moisture levels for crops. Typhoon Dianmu continued to approach Japan from the south but was rapidly weakening. In May, favorable moisture in northern Manchuria benefited emerging soybeans, while below-normal rainfall limited topsoil moisture in southern Manchuria. In early June, unfavorably dry weather prevailed throughout Manchuria, while near- to above-normal rainfall maintained adequate soil moisture for soybeans, corn, and cotton on the North China Plain. Rainfall also maintained favorable soil moisture for crops from the Yangtze River to the southern coast.

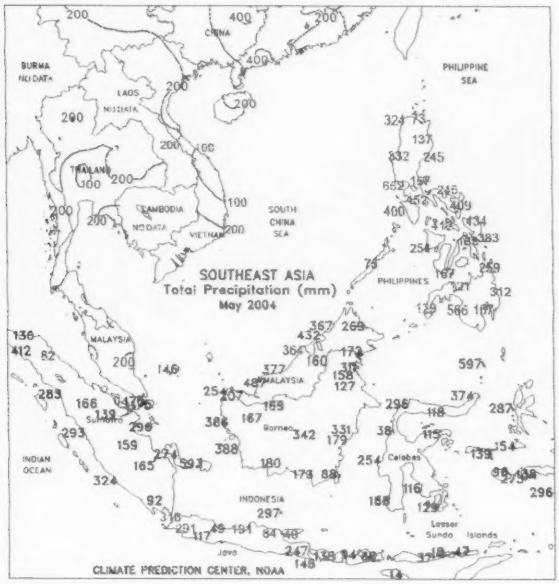


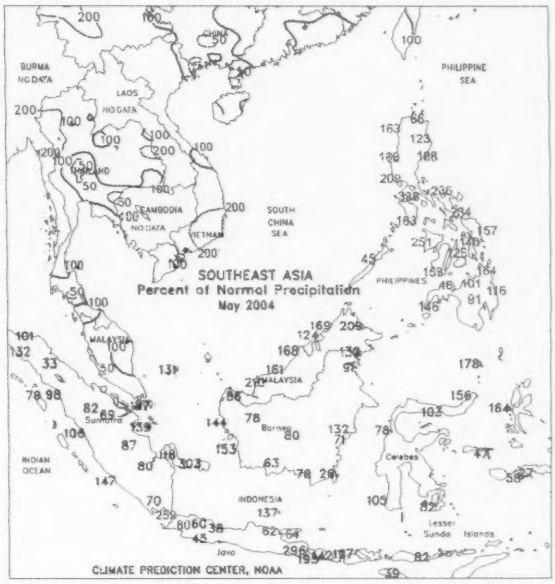


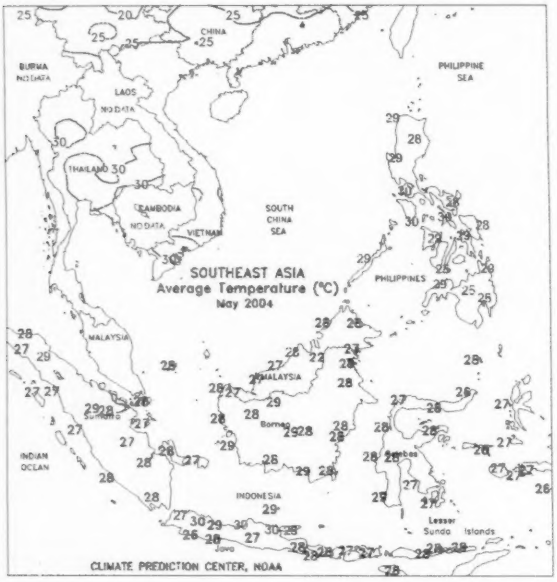


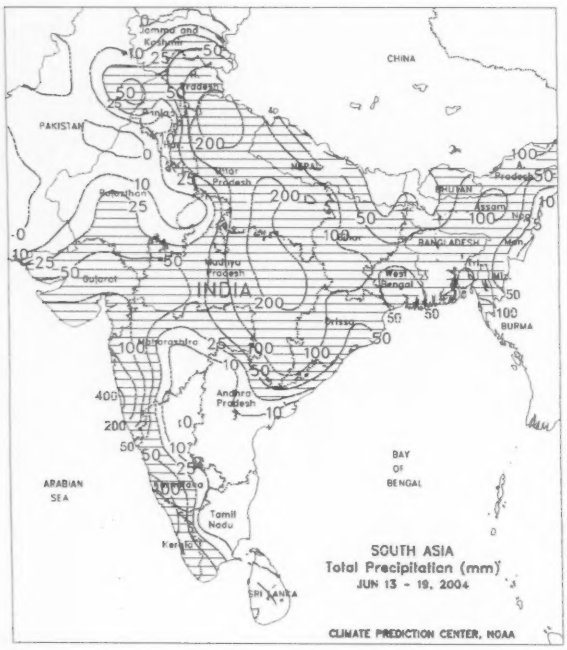
SOUTHEAST ASIA

The remnants of Typhoon Chanthu brought heavy rainfall (50-200 mm) to Thailand early in the week, maintaining high moisture levels for rice and corn. The rainfall extended into most of Vietnam as well, keeping irrigation levels adequate for 10* month rice. Summer-autumn rice harvesting is reportedly underway, and drier weather would be welcome. Showers (25-100 mm) continued throughout the Philippines, maintaining adequate moisture levels for rice and corn. In May, dryness in the Philippines was nearly erased by an increase in seasonal showers and Typhoon Nida by month's end. Above-normal rainfall favored corn and rice throughout Thailand. In northern Vietnam, rainfall kept irrigation supplies high for rice. In southern Vietnam, however, concerns over adequate irrigation levels continued due to dry weather and reduced water levels in the Mekong River. Dry weather kept short-term moisture levels low for oil palm in Malaysia and Indonesia.



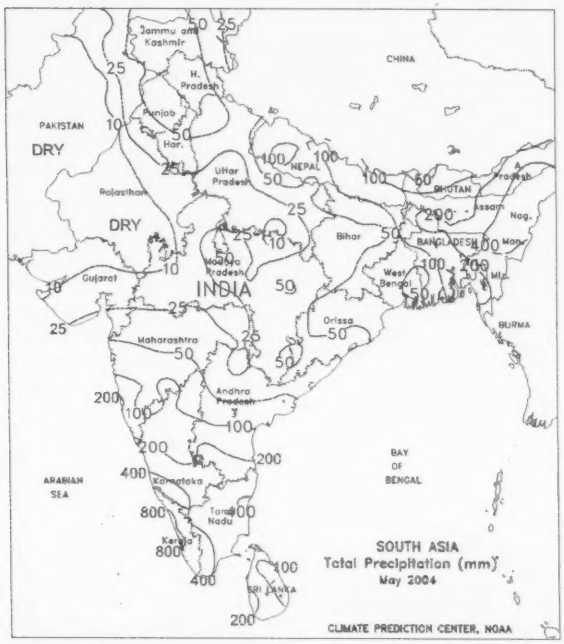






SOUTH ASIA

Unseasonably heavy showers (100-200 mm, locally reaching 300 mm) stretched from north-central India to the southeastern coast, partly from the remnants of a tropical cyclone that augmented moisture from the advancing monsoon. Some flooding was likely in the upper and middle Ganges River Valley and portions of minor river systems emanating from central India. Overall, however, the rainfall increased soil moisture reserves for germination and establishment of central India's predominately rainfed coarse grains, oilseeds, and cotton. In northern India and neighboring locations of Pakistan, the earlier-than-expected rainfall boosted irrigation reserves for cotton and rice. Elsewhere, seasonable showers (50-100 mm) maintained moisture levels for rice development in eastern India and Bangladesh. In the south, heavy rain (50-100 mm or more) continued along the southwest coast, but dry weather dominated the southern interior, promoting fieldwork but reducing moisture for establishment. Temperatures averaged near to below normal throughout the region, reducing the potential for heat stress in recently hot portions of the interior. During May, unseasonable wetness increased pre-monsoon moisture levels, and likely encouraged early field preparations in southern and central India. Unusually heavy rainfall (monthly totals exceeding 400 mm) reportedly generated flooding in parts of southern and eastern India and Bangladesh that usually does not receive rainfall of this magnitude this early in the wet season. The unusual wetness in northern growing areas reduced irrigation requirements for early-planted summer crops but may have affected late winter wheat and rapeseed harvests.


SOUTH ASIA
Total Precipitation (mm)
May 2004
CLIMATE PREDICTION CENTER, NOAA
INDIA
CHINA
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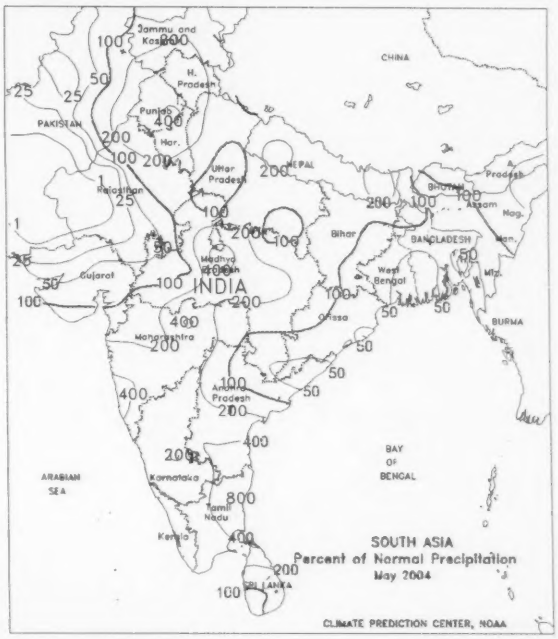
SRI LANKA
BURMA
BHUTAN
NEPAL
BANGLADESH


SOUTH ASIA
Percent of Normal Precipitation
May 2004
CLIMATE PREDICTION CENTER, NOAA
INDIA
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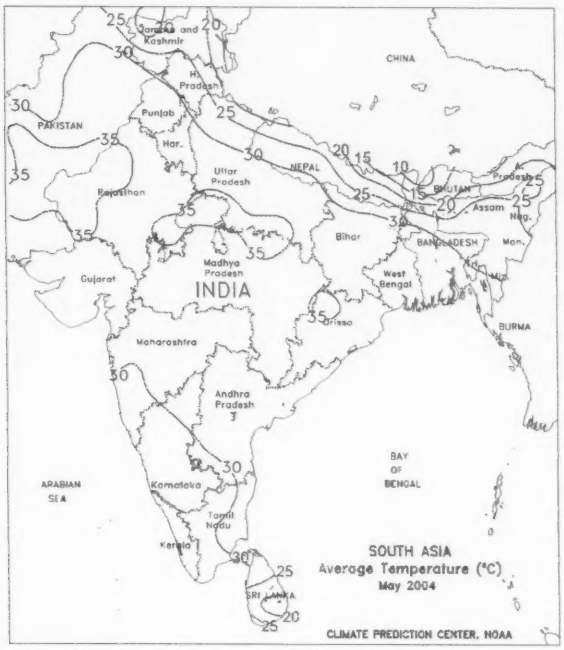
BAY OF BENGAL
ARABIAN SEA
SRI LANKA
BURMA
BHUTAN
NEPAL
BANGLADESH


SOUTH ASIA
Average Temperature (°C)
May 2004
CLIMATE PREDICTION CENTER, NOAA
INDIA
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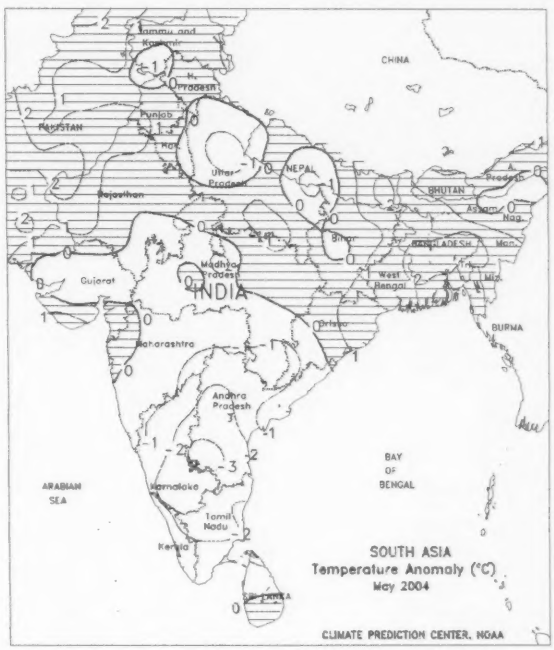
BAY OF BENGAL
ARABIAN SEA
SRI LANKA
BURMA
BHUTAN
NEPAL
BANGLADESH


SOUTH ASIA
Temperature Anomaly (°C)
May 2004
CLIMATE PREDICTION CENTER, NOAA
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CHINA
PAKISTAN
BAY OF BENGAL
ARABIAN SEA
SRI LANKA
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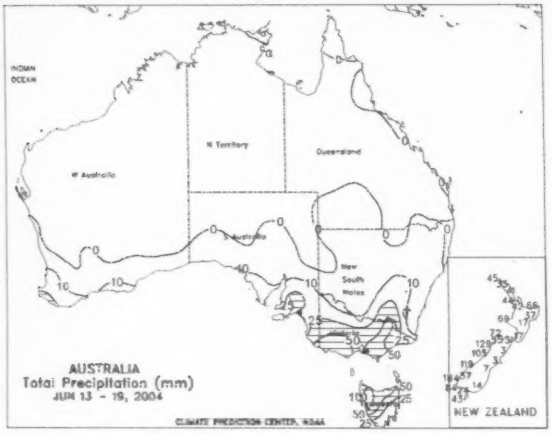
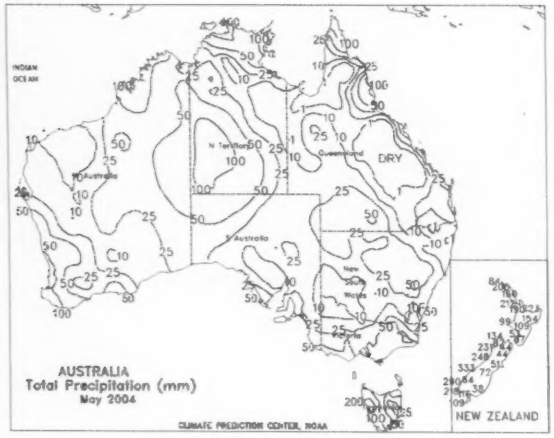
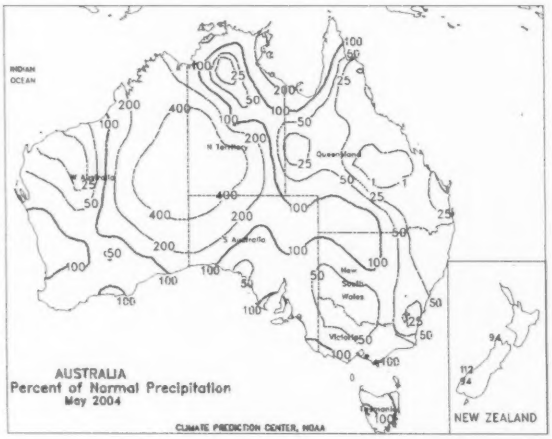
BHUTAN
NEPAL
BANGLADESH

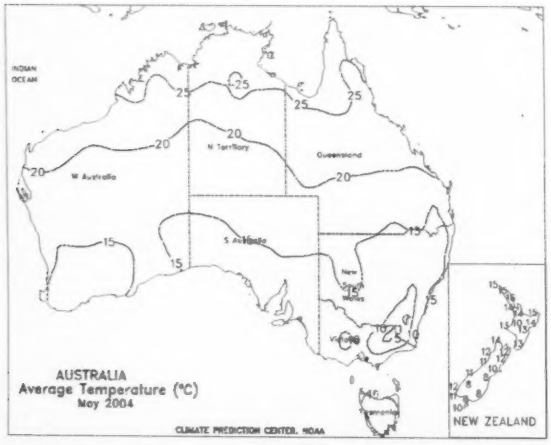


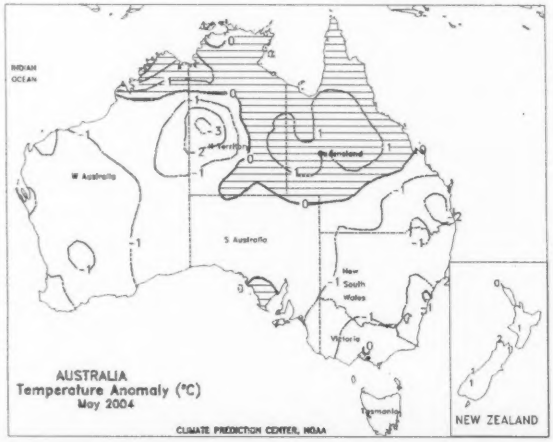
AUSTRALIA

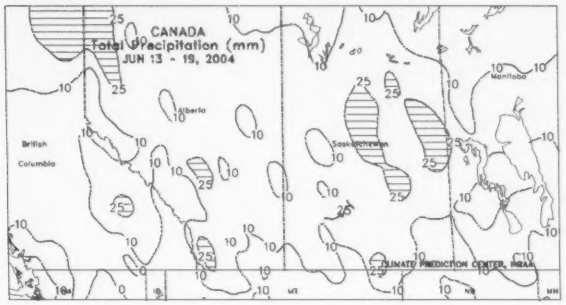
Dry weather overspread northern winter grain areas in Western Australia. Nevertheless, moisture supplies remained sufficient for crop germination and emergence, following the previous week's widespread rainfall. In contrast, showers (2-21 mm) continued in southern growing areas, hampering fieldwork but further improving soil moisture for future crop development. Similarly, widespread showers (5-50 mm) in southeastern Australia caused some disruptions in fieldwork, but the resulting soil moisture encouraged additional winter grain planting and helped early crop development. Farther north, mostly dry (less than 3 mm) weather persisted in northern New South Wales and Queensland, aiding late summer crop harvesting but reducing topsoil moisture for winter wheat and barley development. Temperatures in major winter grain areas throughout Australia averaged about 1 degree C above normal. In May, near-normal rainfall in Western Australia maintained generally adequate soil moisture for winter grain planting and development. Drought continued to plague southeastern Australia. Although showers in late May and early June spurred widespread winter grain planting in southeastern Australia, the rainfall provided only limited long-term drought relief. In northern New South Wales and Queensland, occasional showers favored winter grain sowing and development but allowed cotton and sorghum harvesting to progress with little delay.





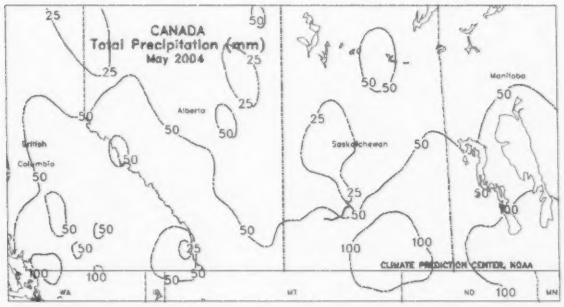


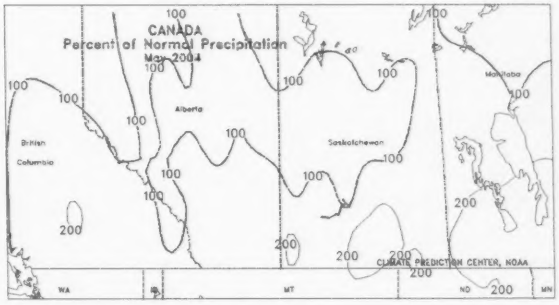


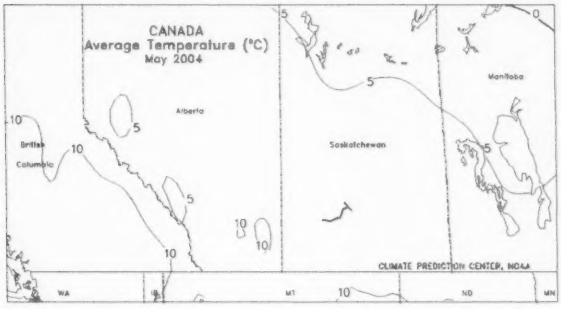


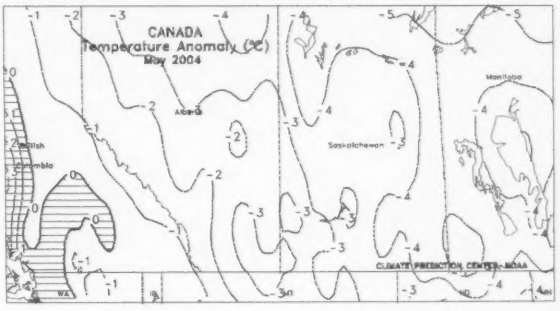
CANADA

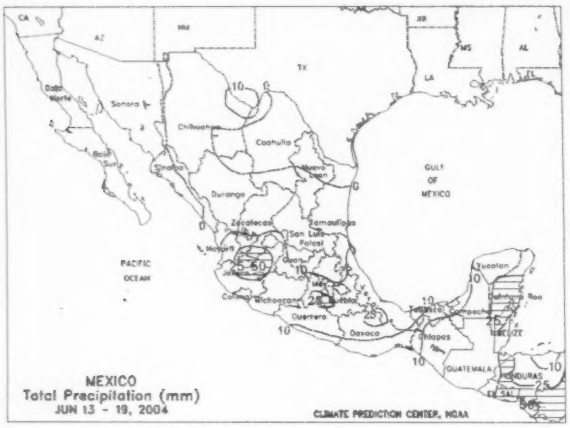
Across the Prairies, cool, showery weather (temperatures averaging 4-6 degrees C below normal; precipitation ranging from 5-25 mm or more) increased moisture reserves for spring crop establishment but slowed final planting efforts. In addition, lows near freezing slowed germination at many locations, but no killing freeze was recorded. According to the Agriculture Departments of Manitoba and Saskatchewan, fieldwork (including replanting of previous damaged crops) was hampered by excessive wetness in southeastern sections of the Prairies, and crops are showing some effects from the unfavorable wetness. In eastern Canada, light to moderate showers (5-25 mm or more) boosted topsoil moisture reserves for corn and soybean germination in southern Ontario, and seasonable warmth (highs in the middle and upper 20s degrees C) promoted vegetative growth. Drier weather continued in eastern Ontario and Quebec, reducing moisture reserves for pastures and crops. During May, unseasonably cool, wet weather delayed planting of spring grains and oilseeds in sections of Manitoba and eastern Saskatchewan. Drier weather promoted fieldwork in the western Prairies. In the east, seasonal warming and showers at generally favorable intervals increased moisture for winter wheat and pasture development, but caused some disruptions in Ontario's corn and soybean planting.





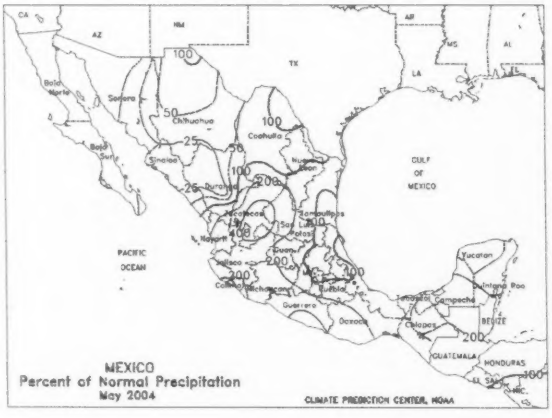


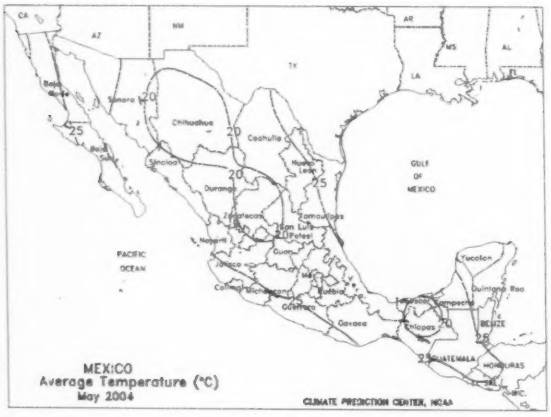


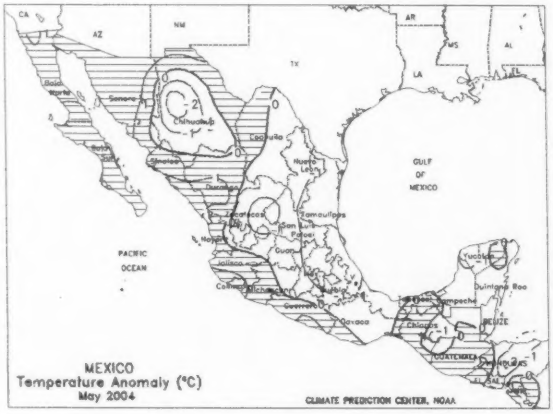


MEXICO

Widespread rain (15-60 mm or more) continued to cover the main Mexican corn belt and southern Mexico, benefiting sugarcane, coffee, oranges, and germinating to vegetative corn. Across the northern third of Mexico, mostly dry and seasonably warm weather reduced moisture supplies for pastures and summer crops. Only scattered, light rain (less than 15 mm) was reported across the western Sierra Madre. Temperatures averaged near normal across Mexico. During May, widespread near- to above-normal rainfall boosted soil moisture for corn fieldwork across the main corn belt and southern and southeastern Mexico. Monthly temperatures averaged near to slightly below normal across most of eastern and central Mexico and near normal elsewhere.

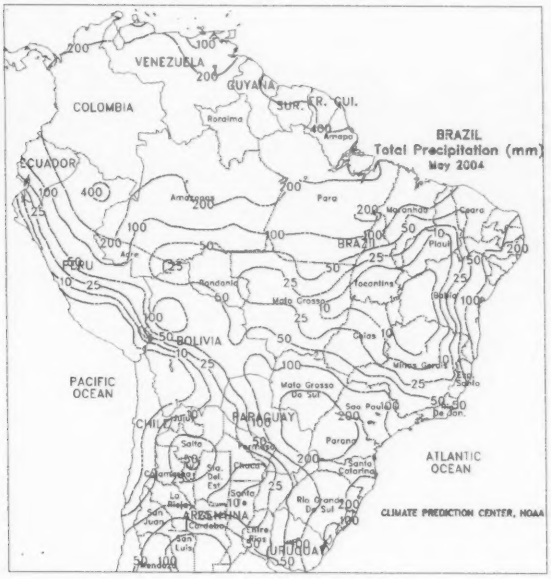


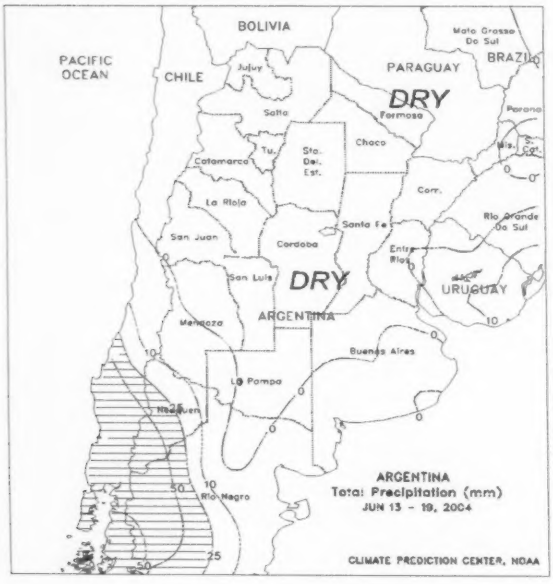




BRAZIL

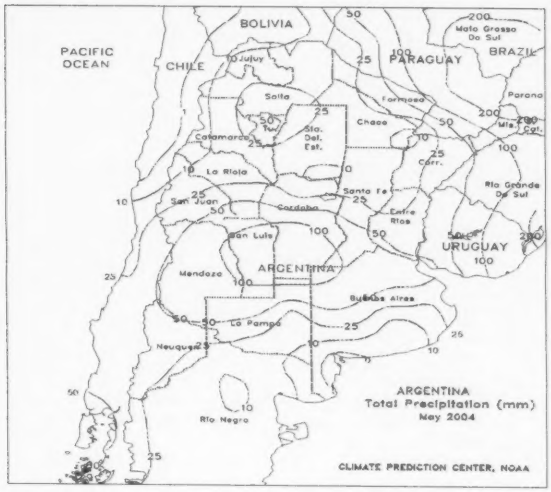
Mostly dry, seasonably mild weather promoted fieldwork in the major coffee states, although light showers (8-22 mm) lingered over Sao Paulo early in the week. On June 14, temperatures fell to 2 degrees C as far north as northern Parana, but freezing temperatures stayed south of the main coffee and citrus areas. Sunny, warmer weather the remainder of the week aided maturation of coffee beans, while promoting winter corn maturation and winter wheat growth elsewhere in southern Brazil. Elsewhere, scattered showers (25-50 mm or more) maintained favorable moisture levels for cocoa and sugarcane in coastal growing areas of the northeast, with warm, seasonably drier weather maintaining irrigation demands in interior growing areas. During May, unseasonably cool, wet weather was unfavorable for maturing coffee in the southerly growing areas, but the moisture continued to improve moisture reserves for immature winter corn and developing winter wheat. Seasonably warmer and drier weather promoted crop maturation in the northern coffee zones. Seasonable showers maintained irrigation reserves for agriculture in the northeast.





ARGENTINA

Mostly dry, warmer-than-normal weather (temperatures averaging 1-3 degrees C above normal, with lows ranging from -3 to 3 degrees C) supported rapid seasonal fieldwork throughout the major growing areas. Topsoil moisture reserves were limited in southern winter wheat areas of Buenos Aires and La Pampa for proper crop establishment. During May, periods of cooler- and wetter-than-normal weather disrupted corn and soybean harvesting in central Argentina but increased moisture for winter wheat establishment in northern growing areas. In contrast, dry weather helped to reduce topsoil moisture reserves in primary wheat areas of southern Buenos Aires, while in northern Argentina, mostly dry weather promoted rapid cotton harvesting.


PACIFIC OCEAN
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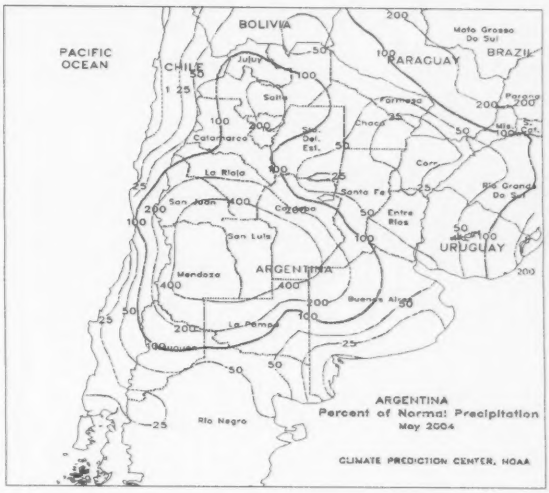
Catamarca
Tu.
Sta. Del. Est.
La Rioja
Santa Fe
Corr.
Mis.
Cor.
Rio Grande Do Sul
San Juan
Cordoba
Entre Rios
San Luis
Mendoza
Buenos Aires
La Pampa
Neuquen
Rio Negro
Mato Grosso Do Sul
ARGENTINA
Total Precipitation (mm)
May 2004
CLIMATE PREDICTION CENTER, NOAA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ARGENTINA
Percent of Normal Precipitation
May 2004
CLIMATE PREDICTION CENTER, NOAA

PACIFIC OCEAN
BOLIVIA
CHILE
PARAGUAY
BRAZIL
URUGUAY
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Buenos Aires
La Pampa
Neuquen
Rio Negro
Mato Grosso Do Sul
ARGENTINA
Average Temperature (°C)
May 2004
CLIMATE PREDICTION CENTER, NOAA

PACIFIC OCEAN
BOLIVIA
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La Pampa
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Rio Negro
Mato Grosso Do Sul
ARGENTINA
Temperature Anomaly (°C)
May 2004
CLIMATE PREDICTION CENTER, NOAA

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